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ARCHAEOLOGICAL REMAINS MONUMENTS & MUSEUMS

VII. SOUTHERN TEMPLES[1]

CONTENTS

1. INTRODUCTION

NAGARJUNAKONDA HAS REVEALED INTERESTING examples of brick temples of the third and fourth centuries dedicated to the Brāhmaṇical gods, variously with apsidal, square or retangular plans.

[1] For the places mentioned in this chapter, see map, fig. 4, pt. I, p. 190.

The internal use of supporting limestone columns, as in the contemporary and earlier Buddhist structures of the place (above, p. 107), was perhaps a local and limited adaptation of stone in the otherwise brick-and-timber constructions, but the columns too must have carried wooden beams. Two other full-fledged examples of apsidal temples in the region are seen in the modest structures at Chejarla (District Guntur) and Ter (District Osmanabad), both originally Buddhist but later adapted respectively as Śiva and Vishṇu temples.

The creation of rock-cut cave-temples in south India towards the close of the sixth century (above, p. 141) broke fresh ground in the history of south Indian temple-architecture. The urge to express in the new rock-material soon caught up, with the result that in the wake of the early cave-temples the total aspects of contemporary brick-and-timber temples came to be carved out of entire rocks as monolithic replicas by the Pallavas (above, p. 147). The Chāḷukyas, with their experience of quarrying out cave-temples in the evenly-bedded soft sandstone, soon perfected the technique of quarrying, sizing and tooling of large chunks of the material and of building them up into their early structural temples—the *maṇḍapa*-type as adopted in cave-temples or imitations of the contemporary storeyed brick-and-timber structures.

2. UNDER THE EARLY CHĀḶUKYAS

A. AIHOLE

The structural experiments of the Early Chāḷukyas were confined to their capital Vātāpi (modern Badami), the adjacent Mahakuteshwar and the twin

cities of Aihole and Patadkal (all in Bijapur District).

At Aihole the typical *maṇḍapa*-temple is exemplified by the Lād-Khān, Kontguḍi and Meguṭi. The first is a square closed *maṇḍapa*-like structure standing on a moulded *adhishṭhāna* (basement). The structure is a pillared hall, with a central group of four tall pillars supporting a flat roof surrounded by two peripheral rows of twelve and twenty pillars of lesser and least heights supporting a sloping roof of slabs. Thus the central bay is enclosed by a double aisle. The intercolumnar gaps of the peripheral group at the edges of the basement are closed on all sides by screen-walls of single massive slabs set on edge, except for the entrance in the middle of the eastern side, where the *maṇḍapa* is preceded by an open *mukha-maṇḍapa* (pillared porch). The slabs of the three central bays on the south and north are perforated into windows, but those of the central and extreme bays in the hind (west) wall are blank. The central flat-roofed bay of the main *maṇḍapa* has a *nandi*, while beyond it, on the west, the central bay in the hindmost aisle is formed into a small shrine by walling up on two sides between the inner and outer pillars and partly in front with a carved doorway, the wall and doorway-slabs raised over a moulded *adhishṭhāna*. This shrine has a sloping pent roof. Over the flat roof of the central bay is built another shrine, its walls made up of massive slabs. The plan and design anticipate similar temples on the west coast, where owing to the heavy rainfall sloping roofs are immensely suitable. In that region, temples of this type have their shrines located in the more or less flat-roofed central bay and are often of the *chaturmukha* type, with openings on all the four sides, as the Jaina temple at Karkala.

In the Lād-Khān there are many features, such as the massive columns of the cave-temple type intermixed with those with capitals with *potikas* of the order, the prevalence of the typical Chāḷukyan *lāñcchana* (coat of arms) embossed on one of the pillars of the *mukha-maṇḍapa*, the types of sculpture and the statuary, the designs of the perforated windows and the intercolumnar *kakshāsana* (stone seats with back-rests) of the *ardha-maṇḍapa*, which would, among many others, suggest a date for it immediately after the three earlier cave-temples of Badami (above, p. 132), i.e., early seventh century.

This dating is also supported by the foundation-inscription dated A.D. 634 in the Meguṭi temple, which is the most evolved of this type. It is a Jaina temple having a principal square structure, which is like a closed *maṇḍapa* on a moulded base, with four central taller pillars walled in between to form the central shrine, closed by peripheral walls on the east, south and west, and one on either side of an entrance in the middle on the north. While the central shrine occupies the larger central space of the nine square bays, two lateral shrines occupy the two hind corner bays, thus leaving a passage between them and in the rear of the central shrine. The three front bays form a rectangular *ardha-maṇḍapa* for the three shrines, while the two on either side of the central shrine form a sort of *antarāla* in front of the two side-shrines. The central bay of the *ardha-maṇḍapa* has four pillars carrying the roof, which is flat, as is the one over the central shrine, while the rest is sloping from centre to the top of the outer walls. The outer walls are relieved four times with three recesses, with pilasters and other members. The relieved parts carry *deva-koshṭhas* (niches), and the two extreme recesses on the east

and west, as also the two flanking the *ardha-maṇḍapa* entrance, have perforated windows. A smaller *mukha-maṇḍapa* on the same *adhisṭhāna* is coeval, but a large open *maṇḍapa* is a late addition. On the top of the central shrine-roof was added another shrine open to the sky in later times.

The Kontguḍi complex consists of three temples, two of them facing each other, with a tall open *maṇḍapa* occupying the open space between them. The third stands to the south of the first and likewise has its shrine-cell at the rear. The *maṇḍapa* temple has a shrine at its centre.

The Durgā temple is essentially of the southern type, with a later northern type superstructure imposed upon it—an incongruity apparent from the fact that the superstructure is a square structure clumsily fitted over an apsidal cella. The temple stands on a hıgh moulded *upapīṭha* (sub-base), apsidal on plan and carryng a perıpheral row of columns on ıts edge that surround the moulded *adhishṭhāna* and walls of an apsıdal *vimāna* and its front *maṇḍapa.* Thus the colonnade forms a covered circumambulatory wıth a slopıng roof. The open *maṇḍapa* is continued forward on a base of smaller width. The perıpheral pillars of the front *maṇḍapa* and those at the forward end of the circumambulatory have large statuary on them. The *adhishṭhāna* inside is again apsidal, moulded with all the components, and carries the apsıdal wall enclosing the inner apsidal wall of the cella or *garbha-gṛiha* and a closed *mahā-maṇḍapa* in front of ıt, with two linear rows of four columns in each row that divide it into a central nave and lateral aisles. The central nave has a higher flat roof raised over a sort of clerestory in front of the cella-entrance, and two lateral aisles have slopıng roofs, at a lesser height than the central

roof. The aisles of the *mahā-maṇḍapa* are continuous on either side, with a closed inner circumambulatory between the inner and outer walls of the cella, which again has a sloping roof. The *adhishṭhāna* of the apse is projected forward into the porch-like front *maṇḍapa* of a lesser width with four pillars in two rows. The reliefs on the *adhishṭhāna* and outer wall are cantoned by pilasters and enclose niches which are framed by shrine-fronts of all the patterns of northern and southern *vimānas*, *kūṭa*, *śālā*, *pañjara*, *udgama*, etc., and contain bold sculpture. The four recesses, two each between the three bays on the north and south sides and two more between the three bays round the apse-end, are provided with perforated windows. Over the inner wall of the cella perhaps rose the original apsidal *grīvā* and *śikhara*, as in the temples at Ter and Chejarla (above, p. 192), either with a wholly-solid core or supported by props inside. The advanced features of the temple, the variety of evolved shrine-fronts displayed in its niches, the style of its sculpture, its diverse corbel-forms and the existence in it of a chute, water-spout and the gargoyle-like *praṇāla*—a late feature—would justify placing the temple in the eighth century. This is also indicated by an inscription of Chāḷukya Vikramāditya II (733-46) on the ruined *gopura* at the south-eastern part of the enclosing-wall. The name 'Durgā' for the temple is misleading, since it was not dedicated to Durgā, and is due to the fact that till the earlier part of the last century the temple formed part of a fortification (*durga*), probably of the Marathas.

B. BADAMI AND MAHAKUTESHWAR

The early southern *vimāna*-type of structural temples built by the Chāḷukyas is exemplified by (1)

the two temples called the Mālegiṭṭi-Śivālaya standing on an outer crag in the hills on the northern side of Badami, (2) the Śivālaya higher up on the main hill on the same side, called the upper Śivālaya, (3) the main temple and the extreme southerly one called Mallikārjuna in the Mahākūṭeśvara group of northern and southern style temples inside an enclosure at Mahakuteshwar in the neighbourhood of Badami, and (4) the temple called Bānantiguḍi on the hill in front of the Mahākūteśvara. Of them, the Mālegiṭṭi Śivālaya (pl. LIX) is the simplest, axially consisting of a massively-built *vimāna*, composed of large blocks of stone, with a closed *maṇḍapa* of almost the same width and an open four-pillared porch of lesser width in front, all standing on a common moulded *adhishṭhāna*. The *maṇḍapa* carries a *hāra* (ring of miniature *vimānas*) made of *karṇa-kūṭas* at the corners with *śālās* in between, the rear *karṇa-kūṭas* forming in common the frontal *karṇa-kūṭas* over the first *tala* (storey) of the *vimāna* behind. The *adhishṭhāna* and the walls of the *maṇḍapa* are relieved in consonance with the *karṇa-kūṭas* and *śālās* above. The central bays on each side of the closed *maṇḍapa*, as also its re-entrant front walls flanking the *maṇḍapa*-entrance, contain niches for sculptures. The recesses on the north and south have perforated windows. The *vimāna* behind rises in two storeys. Its base and walls are relieved thrice to correspond to the four corner *karṇa-kūṭas* and central *śālās*. These reliefs contain plain rectangular niches. The lower storey carries on the top of its *prastara* (entablature) a *hāra* of *karṇa-kūṭas* at the corners and *śālās* in between, the intermediate parts of the *hāra* being decorated by *nāsikās*. The second storey carries a *hāra* of four *karṇa-kūṭas*, closely adhering to and overtopping the corner

faces of the octagonal *grīvā*—a feature of early temples. The cardinal faces of the *grīvā* have *nāsikās* of equal size. The *śikhara* is heavy octagonal and dome-shaped, of almost the same width as the *grīvā* below—again an early feature.

The Bānantiguḍi is of a similar type, though more plain and simple, with a two-storeyed *vimāna*, square on plan, and without a *śuka-nāsikā*. The *grīvā* and *śikhara* are also square.

The main temple of Mahakuteshwar consists of a *vimāna*, square on plan and with a closed frontal *maṇḍapa* preceded by an open porch. The *garbha-gṛiha* has an inner circumambulatory surrounding it. Externally the *vimāna*-wall and its *adhishṭhāna* are relieved in the centre of each side into bays, the two lateral recesses on the north and south walls containing perforated windows framed between pilasters carrying a *prastara* above with a prominent *kapota* (cornice). While the *prastara* carries the southern motif of a *hāra* composed of two *kūṭas* and a *śālā* between the eastern recesses of the north and south walls, the western recesses over the *prastara* above the windows have the northern motifs of *udgamas* and *āmalakas*. The cantoning pilasters at the corners of the walls and the bays have well-developed capital-components of the order. The bays on the walls have niches containing sculptures of Śiva. On the top of the first storey are *karṇa-kūṭas* at the corners and *śālās* over the bays in between. The *adhishṭhāna* is widened and extended forward as the base of the larger square *maṇḍapa* with a central relief each on the north and south sides, and two more, one on either side of the entrance in front, enclose niches, again containing sculptures of Śiva. The recess on either side of the central reliefs on the north and south have perforated

windows. The superstructure, now whitewashed, carries an octagonal *grīvā* and a similar *śikhara* on the top with *nāsikās* on the four sides, and closely attached *karṇa-kūṭas* at the four corners. The closed *maṇḍapa* is pillared inside. The shrine-doorway, as is usual in all the Chāḷukyan examples, is elaborately carved with an overdoor having many moulded components or *śākhā*. The temple belongs to the seventh century. The Mallikārjuna temple inside the enclosure of the Mahākūṭeśvara group is better preserved and is very much of the same type as the main temple.

The upper Śivālaya within the northern fort at Badami has a *vimāna* surrounded by a closed circumambulatory, the walls of which are extended forward so as to enclose a pillared *maṇḍapa* with a central nave having a flat roof in front of the *vimāna* and lateral aisles. These aisles and circumambulatory into which they continue have sloping slab-roofs. The external walls surrounding the *maṇḍapa* and the *vimāna*, as also its *adhishṭhāna*, are relieved with alternating bays and recesses to correspond to the *kūṭas* and *śālās* in the *hāra* above. The recesses have similar tall pilasters of lesser height, carrying *nāsikās* on the top, which constitute the corresponding *kūḍus* of the main cornice above. The *vimāna* rises in four storeys of diminishing squares with prominent cornices—an advanced feature. The *grīvā* and *śikhara* are square, with four *nāsikās* on their four faces, there being no *śuka-nāsikā*.

C. PATADKAL

The Saṅgameśvara, Virūpāksha and Mallikārjuna temples at Patadkal exhibit to a large degree the southerly elements in their *vimānas*, as crystallized

in the contemporary Pallava temples (below, p. 214). The Saṅgameśvara, the earliest of the three, built by Chāḷukya Vijayāditya (697-733), is nearer the Pallava form in that it has no *śuka-nāsikā*, while the other two, which possess this, are the earliest of the Chāḷukyan type and its derivatives possessing this architectural member, as also does the Kailāsa at Ellora (above, p. 151). Both the Saṅgameśvara and the larger Virūpāksha are similar to each other in being square on plan from the base to *śikhara*. The Virūpāksha, built by the queen of Vikramāditya II (733-46), is the earliest dated temple with the *śuka-nāsikā*, being closely followed by the Mallikārjuna, built by another queen of the same king.

The main *vimāna* of the Saṅgamevśara is of three storeys. The lowermost storey is surrounded by two walls, the inner and outer, the second storey being an upward projection of the inner wall, while the outer wall encloses the covered circumambulatory round the sanctum. The latter further extends forward to enclose an *ardha-maṇḍapa* and widens out over the same moulded *adhishṭhāna* to form a closed *mahā-maṇḍapa* with four rows of five pillars each. An open pillared porch is attached to the middle of the northern side of the *mahā-maṇḍapa*. The exterior wall also contains a series of niches containing sculptures of a varied iconography. The *prastara* over the outer wall of the *vimāna* carries a *hāra* of *karṇa-kūṭas* and *śālās* corresponding to the relieved parts of the wall and *adhishṭhāna* below, which encloses inside an open circumambulatory round the second storey over the roof of the lower one. At the centre of each side the *hāra* is pierced by projecting water-spouts, and over them the *hāra*-part carries incipient *pañjaras*, perhaps the first appearance of this third characteristic member of the *hāra* of the southern

temples and the earliest in the Chāḷukyan series. The second storey also carries a *hāra* of four *karṇa-kūṭas* at the corners and four *bhadra-śālās* on the relieved centres of each side. The third storey carries only four cardinal *bhadra-śālās* over the middle of the four sides, coming in front of the cardinal *nāsikās* of the square *grīvā* and *śikhara* that rise behind. The absence of *karṇa-kūṭas* of the *hāra*—the first step towards the elimination of the *hāra* itself—and the placement of the respective *vāhanas* (vehicles) or *lāñchhanas* (symbol) of the main deity enshrined in the *garbha-gṛiha* below at the four corners on the roof of the topmost storey round the *grīvā* became an invariable characteristic of the later temples. The Saṅgameśvara marks another landmark, viz., the insertion of two side-shrines at the two ends of the *ardha-maṇḍapa* on either side of the entrance to the cella dedicated to Durgā and Ganapati.

The Virūpāksha (pl. LX) is a large complex consisting of a tall *vimāna* with axial *maṇḍapas* and peripheral sub-shrines round the court, enclosed by a wall with *gopura*-entrances in front and behind, all designed and completed at one time. As such, this is the earliest extant temple-complex in the Chāḷukyan series. The massive *gopuras* are also the earliest. The *parivārālayas* (sub-shrines) are two-storeyed and are of the *kūta*-or *śālā*-type, originally thirtytwo in number. The axial structures consist of the tall *vimāna* of four storeys, square on plan from the base to the *śikhara*, the lowermost double-walled storey as usual enclosing a closed circumambulatory. The outer wall, with its *adhishṭhāna*, is externally thrown into five bays with four intervening recesses on each side; the cardinal bays at the centre of each side are the widest corresponding

to the *bhadra-śālās* over the *prastara* above, the corner ones middling, corresponding to the *karṇa-kūṭas*, and the intermediary ones, least in width, corresponding to the *pañjaras* over the *prastara*. The *maṇḍapa* is a multi-pillared hall, with its massive pillars richly sculptured, and there are three open pillared porches projected from the centre of the three sides of the *maṇḍapa*, east, north and south. The *śālās* over the north, south and east entrances of the *maṇḍapa* have an additional storey, thus raising them over the general height of the *hāra* and making them simulate inner *gopuras* of a lesser order. The relieved bays cantoned by pilasters with capitals of the order enclose niches inside *kūṭa-*, *pañjara-* or *toraṇa-*frames, while the recesses have variously either niches or perforated windows. The *ardha-maṇḍapa* has the Durgā and Gaṇeśa shrines at either end inside. The second storey is an upward extension of the inner wall of the storey below, its front projected as the base of the *śuka-nāsikā*. On the top it carries a *hāra* of four *karṇa-kūṭas* at the four corners and three *bhadra-śālās* on the three sides except on the *śuka-nāsikā* front. The third storey, a smaller square and of a shorter height, has relieved walls and repeats the same scheme of *karna-kūṭas* and *bhadra-śālās* on three sides, its front projected into the second storey of the tiered *śuka-nāsikā*, which in design is of the form of a multi-storeyed apsidal shrine, with appropriate front. The fourth storey, still smaller, carries only four *karṇa-kūtas* at the corners, revealing the square *grīvā* and basal part of the square *śikhara* with their cardinal *nāsikās* to full view, and is projected on the front to form the top *śikhara* with arched front of the *śuka-nāsikā*. The compound-wall of the complex, following the plan of the group itself, has on its coping *kūṭa-* and *śālā*-heads,

suggestive of a derivation from the Shore-temple at Mahabalipuram (below, p. 215)—a device which gives the impression of a lower storey when viewed from a distance.

The Mallikārjuna, built immediately after and close to the Virūpāksha, is a smaller temple with a four-storeyed *vimāna* with a circular *grīvā* and *śikhara.* It has more or less a similar plan, with a prominent *śuka-nāsikā* projected over the top of the *ardha-maṇḍapa,* from the front of the second, third and fourth storeys of the *vimāna.* The topmost storey does not carry a *hāra* of either *kūṭas* or *śālās,* thus exposing to full view the well-formed circular *grīvā* and *śikhara* with their cardinal *nāsikās.*

3. UNDER THE EASTERN CHĀḶUKYAS

A collateral branch of the Chāḷukyas, called the Eastern Chāḷukyas, ruled over the coastal Āndhra region with their capital at Veṅgi. Among their structural temples, those at Biccavolu in East Godavari District and Pondugala in Guntur District are characteristic.

The group of temples at Biccavolu form a series dating from about the beginning of the ninth century to the first half of the eleventh. Of them three ruined temples, two respectively called Kansaraguḍi and Nakkalaguḍi and the third without a name, all on the outskirts of the village, form the earlier group (*circa* 850-950), perhaps of the time of Guṇaga Vijayāditya (848-91) and his successors. They conform closely to the main southern tradition of the Pallavas and are three-storeyed *vimānas,* square from the base to the *śikhara,* the two lower storeys carrying four *karṇa-kūṭas* and four *bhadra-śālās.*

The *pañjara* and *śuka-nāsikā* are absent, which would place these temples nearer the Pallava cognates and derivatives. The pilasters are tetragonal as in all early temples, with full capitals of the order. The *kūḍus* or *nāsikās* in the flexed cornices are horseshoe-shaped, as in the Pallava and Early Chāḷukyan forms, and the pronounced *makara-toraṇa* aspect is emphasized in detail with a pair of additional *makara*-heads above on either side of the finial.

The three other temples inside the village, the Goliṅgeśvara, Chandraśekhara and Rājarājeśvara, belong to the second group, built a century later (*circa* 950-1050); the Rājarājeśvara was named perhaps after Rājarāja Narendra (1019-60). They are also three-storeyed *vimānas*, square from the base to the *śikhara*, but their superstructures are either entirely or partially restored especially in the regions of the *grīvā* and *śikhara*. They are also plastered over, so that many of their finer details are obscured, though it is seen that the Goliṇgeśvara contained some interesting sculpture.

4. UNDER THE RĀSHṬRAKŪṬAS

Of the structural temples of the Rāshtrakūṭas in the area of the Early Chāḷukyas, whom they ousted in the last quarter of the eighth century and whose architectural traditions they inherited, the one on the outskirts of the temple-city of Patadkal (above, p. 193) is interesting. It is essentially a three-storeyed *vimāna*, square on plan from the base to the *śikhara*, the ground storey containing the principal *garbha-gṛiha*, being double-walled as usual with a closed circumambulatory between the two walls. The

kūḍu-motifs on the cornice-tier of the *adhishṭhāna*, and higher up have lost their original *nāsikā*-shape and become flat triangular reliefs, the precursor of the 'dentil'-reliefs of the Later Chāḷukyan and Hoysala temples. Likewise, the capital-members have changed from their robust shapes into more conventional forms characteristic of the Later Chāḷukyan derivatives. The *navaraṅga* of the lower storey, connected with it by a short *antarāla*, shows on its walls seven bays alternating with six recesses adorned with *nāsikā*-forms containing seated *Jinas* and other figures. The *prastara* carries a *hāra* of *kūṭas*, *śālās* and *pañjaras*. Rising over the roof-level, the inner wall of the main cella forms a second functional storey, enclosing a sanctum surrounded by an open circumambulatory behind the *hāra* over the lower storey. In front its entrance is masked by the basal part of the projected *śuka-nāsikā* that extended over the roof of the *antarāla* below, forming the upper vestibule for this shrine. The second storey carries on its top four *karṇa-kūṭas* and three *bhadra-śālās*, the front one absent because of the *śuka-nāsikā*. The third storey, of lesser width, is relieved in the centre of each face, except on the east or *śuka-nāsikā* face. These contain *udgama*-motifs as in northern temples. The square *śikhara*, following the same scheme of reliefs, simulates a twelve-ribbed member. In front of the *navaraṅga* is the open multi-pillared *mukha-maṇḍapa*, the peripheral pillars having the usual *kakshāsana* between them. Except the two innermost pillars of the peripheral series abutting on the *navaraṅga*-front, all others as well as the four central ones, though in sandstone, are partially lathe-turned, heralding the more completely lathe-turned pillars of chloritic schist or steatite of the Later Chāḷukyas and their successors.

5. UNDER THE WESTERN (LATER) CHĀḶUKYAS

With the coming back to power of the Chāḷukyas, also known as the Western or Later Chāḷukyas, in their home-country towards the close of the century, now with Kalyāṇa as their capital, the original traditions were continued, with a gradual introduction of significant modifications of the essentially southern type of *vimāna*. The sandstone temples of the Navaliṅga group and the slightly later Kalleśvara at Kukkanur near Gadag (District Dharwar) would perhaps mark the end of the sandstone tradition of the Eastern Chāḷukyas and Rāshṭrakūṭas, before the Western Chāḷukyas adopted the chloritic schist. The Navaliṅga is a cluster of nine two- or three-storeyed small *vimānas*, square on plan from the base to the *śikhara*, built round the sides of a linear row of three *maṇḍapas*, with a fourth *maṇḍapa* near the group. They retain many characters of their archetypes in pilasters, *prastara* and other parts. The top storey is devoid of the *hāra* and, but for the *śuka-nāsikās*, they recall the Eastern Chāḷukyan examples at Biccavolu. The pillars of the *maṇḍapa* are partially lathe-turned. The *śikhara* has a splayed out thin brim, its sides are offset and the *kūḍu*-arches retain their arched character.

The Kalleśvara has a three-storeyed square *vimāna* with an *antarāla* and square closed *maṇḍapa* in front. The *maṇḍapa* has four windows, tunnelled into the thickness of the 2-m. thick lateral walls, one on either side of the two niche-like side-shrines inside. The storeys are not boldly marked as in the earlier buildings but are broken up into vertical arrangements of offsets and recesses. The *kūḍus* on the cornices are beginning to lose their

original bold horseshoe shape and have become flat facets. The square-based pillars inside are partially lathe-turned and show some advance over those in the Navaliṅga group. The most interesting feature is the smaller blocks of stone used in the construction, which is in contrast with the large-sized stones used in the earlier structures. The temples are of the latter half of the tenth century.

The large Jaina temple, among the many temples at Lakkundi, also near Gadag, is perhaps one of the earliest examples of temples in this area built of a kind of fine-textured chloritic schist as distinct from the hitherto-used sandstone of this region. The new material, because of its less thick quarry-sizes and tractability, reacted on the workmanship, with the result that the masonry-courses became reduced in size and the carvings more delicate and highly finished. The temple, perhaps built in the latter half of the eleventh century, has a five-storeyed *vimāna*, square on plan from the base to the *śikhara*, and had originally a closed square *navaraṅga* in front, though an open *maṇḍapa* was added in front later on. The central bay of the *navaraṅga* is a larger square than the peripheral eight around it. The second storey, as in the Jaina temple at Patadkal, (above, p. 199), is functional and has an *antarāla-maṇḍapa* infront over the vestibule of the lower storey. This raises the total height of the *vimāna* considerably. The three upper storeys are symbolic and had the *śuka-nāsikā* projected in front. The *kūḍu*-ornaments on the cornices, though flat, retain their arched shape and are characterized by *simha-mukha* (lion-mask) finials. The pilasters on the walls are slender and between pairs of them are tall *nāsikā*-fronts; in the recesses occur for the first time the 'decorative pilaster'—a pilaster carrying a shrine-pavilion on

the top of its abacus—a characteristic of contemporary Chcḷa temples in the south—framed inside a *toraṇa* carried on two flanking pilasters.

The Kāsī-Viśveśvara temple at Lakkundi (pl. LXI) and the Mahādeva temple at Ittagi, not far from Gadag, mark the art in this area at its zenith under the Western Chāḷukyas. The Iltagi temple was built according to its foundation-inscription in 1112 and was the centre of a complex, all built over a specially-raised terrace beside an ornamental tank. The main structure, now extant, is a five-storeyed *vimāna,* its *grīvā, śikhara* and *stūpi* missing. The entire *vimāna* is thrown into five bays on each side, the central thrown out the most, with narrower recesses in between and the bays again offset repeatedly, so that the plan is apparently scalloped. There are *karṇa-kūṭas* at either extreme over the *prastara* of each side of the storeys with a *bhadra-śālā* at the centre and two *pañjaras* intervening, one in each recess. Round the cella the most-projected central bays carry broad niches in the form of miniature *vimānas,* with pillars, *prastara* and superstructure, while the cantoning faces of the *karṇa-kūṭas* have narrower elevations of shrines. The *adhishṭhāna* is elaborately moulded. In front of the *vimana,* at the ground level and on the forward extension of the same *adhishṭhāna,* stands a closed *navaraṅga* connected to the *vimāna* by an *antārala.* The central ceiling is raised and is highly ornamented particularly in its corner-slabs. The *maṇḍapa* has three entrances, and projected pillared porches which connect it with an open multi-pillared front *maṇḍapa,* again with projected porches. The second, third and fourth *vimāna*-storeys are projected forward over the *antarāla* into the typical *śuka-nāsikā.* The excessive decorative elements of the temple, as also the plan and other features, proclaim its

chronological proximity to the typical temples of the Hoysalas and the Kākatīyas.

6. UNDER THE HOYSALAS

The temples built under the aegis of the Hoysalas of Mysore (twelfth-thirteenth centuries) were also built of a very tractable, dense and fine-grained chloritic schist which lend to fine carving. The temple in general consists of a *vimāna*, connected by a short *antarāla* to a closed *navaraṅga*, which is often preceded by a *maṇḍapa*. It is not also unusual for it to have three main *vimāna* (*tri-kūṭa*), connected to the three sides by their respective *antarālas* to a common *navaraṅga* which has the front *maṇḍapa* on the fourth side. The whole complex stands on a raised terrace, broad enough to have a wide common circumambulatory. By the repeated offsetting not only of the sides, as in the later Chāḷukyan examples, but also of the angles, the resulting plan becomes stellate, a configuration which extends from the terrace to the topmost storey. This gives a larger surface-area by the proliferation of facets for the execution of a profuse and rather crowded sculpture, for which the Hoysala temples are noted. The *prastara* has a prominent eaves-like cornice. The *maṇḍapas* have the gaps between their outer pillars closed by perforated or sculptured screens. The superstructure is a scheme of close-set *hāras* essentially of *kūṭas*, rising one behind the other and each marking a storey, the topmost carrying a short *grīvā* and octagonal *śikhara* terminating into a *stūpi*. The front of the upper storeys is drawn into a *śuka-nāsikā* over the *antarāla* below. The pillars inside the *maṇḍapa* have square bases and shafts finely

polished on the lathe and capitals of the order. Often the axial series of structures is surrounded by an open court and cloister inside the enclosure-wall that has an entrance only on one side—the *mahādvāra*.

Of the numerous temples of the Hoysalas, the most well-known are the Hoysaleśvara, among the many temples at Halebid, and the Chenna-Keśava at Belur (both in District Hassan), the two towns being the earlier and later capital-cities of the Hoysalas, and the Keśava temple at Somnathapur (District Mysore).

The Chenna-Keśava temple at Belur was built by Hoysala Vishṇuvardhana in 1117, and the name of the consecrated deity was Vijaya-Nārāyaṇa. It is the principal temple in a complex of later temples, all inside a spacious courtyard surrounded by a cloister and compound with a *gopura*-entrance on the east, now replaced with a modern superstructure. As designed and completed by Vishṇuvardhana, it had the *vimāna* of a beautiful stellate plan and superbly-carved doorway, with an *antarāla* connecting it to the *navaraṅga*. A few generations later, in the time of Ballāla II, who built the compound and the tank at the north-east corner, the *maṇḍapa* was provided with pierced windows between the pillars. The peripheral columns of the *mandapa*, except for the porch-entrances that are fitted with ornate doorways, had a running platform (*kakshāsana*) inside. The whole stands on an terrace 1·5 m. high, the plan of the circumambulatory following that of the structures that it carried. The *adhishṭhāna* of the *vimāna*, *antarāla* and *maṇḍapa* is profusely carved with long lines of friezes, animal and narrative. The walls carry sculptures of iconographic interest and reliefs of miniature shrines. The bays on the three cardinal projections of the main *vimāna* form smaller

vimānas with cells inside. The overhanging *kapota* of the *maṇḍapa* is supported by numerous finely-carved caryatid-like feminine figures in graceful poses, called *madanikās*. In front of the main doorways of the *maṇḍapa* on the east, north and south, on either flank of the steps leading from the platform below, are posed two small *vimānas*, one on either side, with two more on the flanks of the steps leading from the court to the platform. The superstructure of the main *vimāna* is now lost. The pillars inside are lathe-turned, and a few of them are intricately carved or carry exquisite sculpture. The raised coffer-like central ceiling rising in eight tiers is also very intricately carved and bears a massive and delicately-wrought pendentive in the centre. The ceiling is supported at the base by bracket-figures even more beautiful than the *madanikās* outside. The temple is a veritable museum of sculpture, large and small, and intricate vegetal and floral carving.

The Hoysaleśvara (*circa* 1150), among many other temples at Halebid, is a composite of two similar structures standing side by side on a raised common platform. Each unit, like the Belur temple, consists of a *vimāna* of a star-shaped plan, with an *antarāla* and *navaraṅga* in front, which has cruciform projections on its three sides. The two adjacent inner arms of the crosses are connected to form a common transept linking up the two temples. Externally the intercolumnar spaces of the projected porches are screened by perforated windows above the level of the *kakshāsana*. The pillars inside are lathe-turned, and the central coffered ceilings of the *navaraṅga* have their bases supported as it were on beautiful bracket-figures. Externally the walls of the *vimāna* and the connecting transept, as also walls of the *maṇḍapas*, are covered with large sculptural

reliefs of remarkable fineness, while the mouldings of the *adhishṭhāna* are each an elaborate animal or narrative frieze. The superstructure of both the *vimānas* is lost. The platform, with the same plan as the structures, is a broad open circumambulatory. In front of the whole stand two open pillared *nandi-maṇḍapas* and the one in front of the southern *vimāna* has a shrine behind. The two are unsymmetrical later additions. Though incomplete, the Hoysaleśvara, coming close after the great temple at Belur, marks the climax of Hoysala art and architecture.

The latest in the Hoysala series is the Keśava temple at Somnathpur built in 1268, which, though smaller, is more exquisitely carved. It is a *tri-kūṭa* temple (pl. LXII) with three principal *vimānas* of equal magnitude, complete with the characteristic *śuka-nāsikā*. Their *antarālas* open into a common *navaraṅga* on its west, north and south sides, the eastern side opening into a larger closed *navaraṅga* with fine lathe-turned pillars and elaborately-carved cofferred ceilings of nine different designs, the central one being the most intricately carved. The sides of the *navaraṅga* above the level of the *kakshāsana* inside and over the *adhishṭhāna* outside are closed by perforated screens inserted between the pillars. The plan of the three *vimānas* is stellate from the base to the *śikhara*; their walls, with many re-entrant angles, expose the maximum number of facets for larger sculptures with or without framing shrine-motifs. The whole is mounted on the top of a platform of the same plan, with a wide circumambulatory space and two miniature *vimānas* flanking the flight of steps. The axial series is surrounded by an open court all round, with a peripheral cloister of sixtyfour shrines set in a continuous line. The *maṇḍapa* at

entrance behind the main entrance is a multi-storeyed rectangular structure, also with lathe-turned pillars.

7. UNDER THE KĀKATĪYAS

The temple at Hanamkonda (Warangal District), called the Thousand-pillared Temple, is a transition from the Late Chāḷukyan to the Kākatīya temples of this region. Built in 1162 by king Pratāparudra, the main part consists of a triple shrine (*tri-kūṭa*) of considerable dimensions, dedicated to Śiva, Vishṇu and Sūrya, opening into a common *maṇḍapa*, all standing on a common platform. The *maṇḍapa* has open corners between the shrines on its three sides. The *adhishṭhāna*, the walls with pilasters and the *prastara* are repeatedly offset, with the central bay, projected most, carrying a small *vimāna* with cella. The superstructure is lost in all the three. The pillars of the *maṇḍapa* are lathe-turned. What is more interesting is the multi-pillared *maṇḍapa* with about three hundred pillars, all richly carved. Between this and the main structure is interposed a *nandi-maṇḍapa*.

The ruined temple within the fort at Warangal deserves mention for the elaborate *toraṇas* (pl. LXIII) marking its entrances.

The temples at Palampet (Warangal District) form a group of typical Kākatīya monuments. The main temple of the group, built in the beginning of the thirteenth century, stands on a high platform and is enclosed by a massive wall. In front is a *nandi-maṇḍapa*. The main *vimāna* is essentially square on plan from the base to the *śikhara*, the sides offset into five bays, the central further offset as the most projecting facet and containing a three-tiered replica

in miniature of the main *vimāna*. The other bays have tall pairs of close-set pilasters carrying on the top a *vimāna* superstructure of the southern or northern variety alternately. The storeys consist of indistinct *hāras*, where the *kūṭas* are more conspicuous, the *grīvā* again being indistinct, and of almost the same width as the square and domical *śikhara*. The entire superstructure is of brickwork. The *vimāna* is connected with the *navaraṅga* in front by a closed square *antarāla* or *ardha-maṇḍapa*. The whole is surrounded by a raised platform with an outer series of thirtytwo pillars and a circumambulatory. On the platform inside are set eight sub-shrines in pairs, adjacent to each corner of the *navaraṅga*. The most interesting feature is the array of caryatid-like brackets, rising from the capitals of the pillars and strutting up the beams or projected cornice or *kapota*. Twelve of these are almost life-size feminine figures with graceful bends of the bodies and the rest are rearing *vyālas*, their hind legs resting over elephant-heads. The bases of the peripheral pillars of the *maṇḍapa* are connected up by a balustrade, forming as it were the *kakshāsana* of the platform inside. Externally these are carved profusely with panels of diverse interest, including *mithunas*. The interior also is replete with sculpture and the ceilings of the bays are ornate. The *hāra* of the first storey is continued over the edge of the *maṇḍapa*-roof. While the main structure is of a reddish sandstone, the decorations and bracket-figures are of black polished basalt or hornblende.

8. UNDER THE PALLAVAS

In about the last quarter of the seventh century, in the reign of the Pallava king Parameśvaravarman,

experiments on constructions in stone was started. The shrine of Vedagirīśvara on the top of the hill at Tirukkalukkunram (Chingleput District), of the time of Parameśvaravarman, was originally a dolmen-like construction built of upright gneiss slabs, later encased by moulded stonework externally, with a roof-slab on the top. The inner faces of the slabs contain relief-sculptures, including the characteristic Somāskanda panel. The apsidal temple at Kuram (same District), built also in the time of the same ruler, employs granite slabs laid horizontally to form the mouldings of the *adhishṭhāna*, while the walls above are of upright slabs, set on edge, with a brickwork reinforcement from inside. But in the time of his successor Rājasiṁha (*circa* 700-28), who was a great builder, many structural temples were built at Mahabalipuram, as also Panamalai (South Arcot District) and his capital Kanchipuram (Chingleput District), employing stones of different kinds and hardness. Granite-gneiss or charnockite was soon to become the building-material of his successors and the subsequent dynasties that followed in the southernmost parts of south India, as it is in present times also.

The Shore-temple at Mahabalipuram (pl. LXIV), a complex of three shrines with accessory *maṇḍapas*, is perhaps an early essay of Rajasiṁha in building a large temple-complex of hard stone. Of the three shrines, the largest called Kshatriyasiṁheśvara, facing the sea on the east, and the smaller *vimāna* called Rājasiṁheśvara, facing west, are both dedicated to Śiva and have between them a rectangular *vimāna*, without superstructure, enshrining recumbent Vishṇu, cut out of a low living rock. The axial *maṇḍapas* with the *gopuras* are in front of the smaller *vimāna*, the whole enclosed by a

massive compound-wall. The Kshtriyasiṁheśvara, standing at a higher level with its own enclosure-wall set closer round its *vimāna* and *ardha-maṇḍapa* bases, is a slightly later addition seawards. The smaller western *vimāna* is square on plan from the base up to the *grīvā* and is three-storeyed with *hāras* of *kūṭas* and *śālās* over the façade of the *ardha-maṇḍapa* and all round over the second storey above. The third storey rises high and clear off over the *hāra*, carrying in its four corners figures of *bhūtas* and a tall octagonal *grīvā* surmounted by a *śikhara*, all tall and octagonal. The *stūpi* is of polished black basalt. The pilasters on the walls have for their bases rearing lions or *vyālas*, a characteristic of the time. The four-storeyed eastern *vimāna* is also likewise square up to the *grīvā*, the first storey enclosing the shrine over the *adhishṭhāna* rising high above the surrounding enclosure-wall. The top of this storey has four seated lions at the four corners, while the coping of the enclosure-wall is a *hāra* of *kūṭas* and *śālās*, with a larger *śālā* surmounting the seaward opening on the east. The second storey of the *vimāna* carries a full *hāra* of four *karṇa-kūṭas*, four *bhadra-śālās* and eight *pañjaras*. The third storey has only four *karṇa-kūṭas* and four *bhadra-śālās*, while the fourth carries on the top at the corners four seated *bhūta*-forms with a tall octagonal *grīvā* and *śikhara*. The *stūpi* again is of black basalt. The row of *kūṭas* and *śālās* over its enclosure-walls, which continues on the west over the top of the Vishṇu shrine produces the semblance of a five-storeyed *vimāna* from outside. The usual Somāskanda reliefs are found on the hind walls of both the Śiva shrines in addition to fluted *liṅgas* of black basalt, installed perhaps slightly later in the same region in the centre on the floor. The sculpture on the

walls, much inferior to the fine rock-cut reliefs of Mahabalipuram, are large compositions done *in situ*.

The Tālagiriśvara temple at Panamalai, also built by Rājasiṁha, is an elegant construction in hard reddish granite. Its square moulded *adhishṭhāna*, as well as the walls of the first storey enclosing the principal shrine above, are projected much forward on the middle of the sides, the rectangular bay on the east forming part of the *antarāla*, and those on the other sides contain shrines and, like the bay on the east, carry the large forwardly-set *bhadra-śālās* of the *hāra* above, while the *karṇa-kūṭas* occupy the four corners of the main square. The second and third storeys of the four-storeyed *vimāna* repeat the same plan of the bays on the cardinal sides carrying four *bhadra-śālas* with *karṇa-kūṭas* at the four corners, while the topmost storey has no *hāra* but four *nandis* on its four corners. A modern brick-and-stucco *grīvā* and *śikhara* replace the octagonal stone originals as does the metal *stūpi* on the top. The rear wall of the sanctum has a Somāskanda relief much higher above the horizontal middle line, suggesting the original design of a simultaneous installation of a *liṅga* in the centre of the floor and the necessity therefore of keeping the panel clear above it. The inner walls of the *ardha-maṇḍapa* has large reliefs of Brahmā and Vishṇu. The northern outer shrine contains remnants of Pallava mural painting depicting Śiva in *tāṇḍava* with Pārvatī.

The Kailāsanātha temple-complex at Kanchi (pl. LXV), also built by Rājasiṁha and his son Mahendravarman, is built of coarse sandstone, incorporating gneiss-slabs in the top and bottom courses of the *adhishṭhāna*. The main *vimāna*, Rājasiṁheśvara (now called Kailāsanātha), is a four-storeyed and essentially square structure up to the *grīvā*,

which and the *śikhara* above are octagonal. The moulded *adhishṭhāna* and the outer walls of the first storey are not only prominently relieved into four rectangular bays on the four cardinal sides as in the Panamalai temple, but also disposed as four square bays at the four corners, in consonance with the four *bhadra-śālās* and four *karṇa-kūṭas* of the *hāra* above. While the eastern rectangular bay forms the *antarāla*, the others form attached two-storeyed *vimānas* with cella inside the lower storey enshrining large relief-sculptures on their walls. The inner wall of the *garbha-gṛiha* is plain and square. The second storey rises over the corbelled slabs forming the ceiling over the closed circumambulatory that bridge the space between the tops of the outer and inner walls. While the *pañjaras* are absent over the first storey, their place being taken up by smaller intermediary *śālās*, the second storey carries full *hāras* with *kūṭas*, *śālās* and *pañjaras*—two-storeyed miniature *vimānas* of the respective type. The third storey has again a *hāra* of *kūṭas* and *śālās*, while the fourth carries only four *nandis* at the four corners. The cantoning pilasters of the outer wall of the *vimāna* round the sanctum have the characteristic rearing lion-bases, as also the corner pillars of the detached *maṇḍapa* in front. The whole is surrounded by a compound-wall enclosing an open court inside The large opening is occupied by a large rectangular two-storeyed *śālā*-type *vimāna*, the Mahendravarmeśvara, built by the son, with its *gopuram*-like *ardha-maṇḍapa*. Both its storeys are devoid of the *hāra*. The western opening is a real but small *gopura*. All round the inner face of the compound-wall is built an array of fiftyeight small *vimānas* mostly of the *kūṭa* type, variously containing group-sculptures of Brahmā and Vishṇu, paintings or

sculptures of Somāskanda. The external walls of these smaller *vimānas* as also the recesses between them are filled with relief-sculpture adding to the profusion of similar sculpture on the walls of the two main *vimānas*, thus making the complex a veritable museum of iconography and plastic art. The Mahendravarmeśvara has a smaller enclosure with a *gopura* in front and lateral entrances in addition near the two front corners. Internally there are two lateral rectangular shrines in the centre on north and south, all a subsequent addition within Pallava times. In front of the whole complex stands a row of eight small *vimānas*, independent memorials of the square *kūṭa*-type with octagonal *grīvā* and *śikhara*. All of them contain bas-relief Somāskanda panels on their hind walls, as do the two principal shrines, where in addition there are fluted *liṅgas* installed on the floor.

The Vaikuṇtha-perumāḷ temple built by Nandivarman Pallavamalla, also at Kanchi, is dedicated to Vishṇu. It is another large structure built of sandstone, with an admixture of granite in the top and bottom courses of the *adhishṭhāna*. It has a square four-storeyed *vimāna*, with all the storeys except the top one functional and containing three superposed *garbha-grihas*, to enshrine the three poses of Vishṇu —standing, sitting and reclining. This has been achieved by a system of three concentric walls, forming three concentric squares on the top of a moulded *adhishṭhāna*, the innermost wall rising to the height of the three storeys and enclosing the three tiers of cells. The intermediate wall rises to the roof-level of the second storey, while the outermost rises to that of the first. The first storey has its cella surrounded by two closed circumambulatories; the outer one functions as such,

while the inner one provides for two flights of steps, one on either side from the rear, giving access to the single closed circumambulatory round the sanctum of the second storey. The open outer ambulatory of the second floor is surrounded by a balustrade formed by the *hāra* of *kūṭas*, *ṣālās* and *pañjaras*. The intermediate wall extending up to the ceiling-level of the second storey and enclosing the closed circumambulatory round it carries on the top a similar *hāra*, forming the parapet edging the open circumambulatory round the third storey. The fourth storey, a slightly smaller square, is closed on all sides and carries the octagonal *grīvā* and *śikhara*, now much plastered, and a metal *stūpi* on top. The lowermost storey and the *ardha-maṇḍapa* in front are surrounded by a narrow open court at the level of the base of the *adhishṭhāna*, the whole again surrounded by a pillared cloister. The wall of this cloister carries on the top a *hāra* of *kūṭas* and *śālās* at a level slightly lower than that of the first storey, so that when viewed from outside, the whole simulates in appearance a five-storeyed *vimāna*. This is the structural prototype, with one more storey added, of the monolithic copy seen in the Dharamrāja-ratha (above, p. 149). In addition to the numerous sculptures on the bayed walls of the storeys and the *maṇḍapa* in front and contemporary inscriptions, the most interesting content of this temple is a series of panelled sculptures narrating the history of the Pallavas from their legendary ancestors down to the rule of Nandivarman II Pallavamalla.

The Mukanda-Nayanār temple at Mahabalipuram is a plainer structure in hard stone, square and two-storeyed, with an octagonal *grīvā* and *śikhara* and a plain *ardha-maṇḍāpa* in front. The *hāra* over the first storey, which extended over the top of the *ardha-maṇḍapa*, is partly lost, as also the

upper parts of the *śikhara*. There is a Somāskanda panel inside the shrine on the back wall, and the pilasters on the walls are simple with crude capitals.

The other interesting temples belonging to this period are the Mukteśvara and Mātaṅgeśvara, Airāvateśvara, Vālīśvara, Iravātanśvara and Piravātaneśvara, all at Kanchi, built mainly of sandstone with granite slabs forming the base and top of the *adhishṭhāna*, and the Olakkanneśvara on the top of the hill at Mahabalipuram, built of a greyish-white soft stone. All are composite varieties of a square *vimāna* with a varying number of storeys, where the upper storeys are non-functional and are closely girt by a *hāra* over the storey below and with different plans of the *śikhara* and *grīvā*. The Iravātaneśvara and Tripurāntakeśvara are two-storeyed, square throughout, including the *grīvā* and *śikhara*. The Mātaṅgeśvara and Mukteśvara, square in their basal parts and three-storeyed, have a circular *grīvā* and *śikhara*. The Piravātaneśvara and Vālīśvara, square in their basal parts and with two and three storeys respectively, have an octagonal *grīvā* and *śikhara*. All of them carry low-relief sculptures on their walls.

But soon after, and perhaps in the first half of the long reign of Nandivarman, temples came to be built entirely of granite blocks, finely moulded, carved and sculptured, as seen in the granite *adhishṭhāna* of the brick temple of Vaikuṇṭha-perumāḷ and Sundaravarada-perumāl at Uttiramerur (Chingleput District), of the time of his successor Dantivarman; in the former the niches were meant to contain stucco figures and in the latter slab-reliefs.

The Viraṭṭāneśvara temple at Tiruttani (Chingleput District) is a very good example of a single-storeyed *vimāna*, square in its *garbha-griha* part and carrying an apsidal *gṛīvā* and *śikhara*. It was built

of hard black stone in the ninth century in the time of Pallava Aparājitaraman, one of the last rulers of the dynasty. It contains some good bas-reliefs fitted into its wall-niches and front face of the apsidal *śikhara*.

The apsidal *vimāna* in the compound of the Bhaktavatsala temple-complex at Tirukkalukkunram (Chingleput District) is a good example of the same apsidal type, perhaps a little earlier than the Vīraṭṭāneśvara. It is now shorn of its superstructure and is used as the treasury of the present temple.

9. UNDER THE EARLY PĀṆḌYAS

Following their rock-cut-temples and the single carved-out monolithic *vimāna* at Kalugumalai (above, p. 153), the Pāṇḍyas of the south continued in their homeland their architectural work much in the line of the Pallavas but with a slight admixture of Chāḷukyan traits. Though many of their structural temples are referred to in inscriptions in the area round about their capital Madurai, only a few are extant. The series of small all-stone temples, with elegant and simple plan and complete with *vimāna*, *ardha-maṇḍapa* and larger closed *mahā-maṇḍapa*, at Kaliyapati, Tiruppur and Visalur (Thiruchchirappalli District), are perhaps the early survivals of the Pāṇḍyan tradition. They have all square single-storeyed *vimānas* with simple moulded *adhishṭhāna* less than 2 m. square at the base and carrying on the top over the cella a square *grīvā* and *śikhara*. They have often eight small and elegant sub-shrines, dedicated to the ancillary deities (*ashta-parivāra*) inside the enclosure-wall, disposed at the corners and the middle of each side and rear, the last, in the Śiva temples, dedicated to *nandi* coming to occupy a more central

place in front of the *mahā-maṇḍapa* and behind the small *gopura*-entrance. While all the rest are square on plan like the main *vimāna*, that on the middle of the south side, dedicated to the *sapta-mātṛikās*, is rectangular of the *śālā* type. The *mātṛikās* came to have a fixed position in the temple-plan of the later Pallavas, the Pāṇḍyas, the Muttaraiyars and the Early Choḷas and their vassals. The cult of Chaṇḍeśa, as the principal seneschal of a Śiva temple, had its beginnings from the time of Rājasiṁha Pallava and was by now crystallized, so that he occupied an honoured place in the pantheon as one in the *ashṭa-parivāra* till about A.D. 1000, when, in the time of Choḷa Rājarāja, he, like *nandi* of earlier days, came to have a close proximity to the main *vimāna* on its northern side.

The Śiva temples at Tiruvāliśvaram and Korkai, both in Tirunelveli District, are best attributed to the Pāṇḍayas. They are all-stone temples, called *karrali* in contemporary and later inscriptions. The Tiruvāliśvaram *vimāna* (900-50) is a fine and elegant structure, noted for its fine relief-sculpture of rare iconography over its *prastara* and on the faces of its *hāra*-components. It is two-storeyed and square, with an *ardha-maṇḍapa* in front, carrying on the top an octagonal *grīvā* and *śikhara*, now renovated. This temple perhaps is the first to depict the well-known *ānanda-tāṇḍava* form of Śiva among its panels. The Akkaśālai temple at Korkai is, on the other hand, a much plainer structure of a later date. It has a single-storeyed *vimāna* with square *grīvā* and *śikhara.*

10. TRANSITION FROM THE PALLAVA TO THE CHOḶA STYLES

The Muttaraiyars, who held the territory on either side of the Kaveri in Thiruchchirappalli and

Thanjavur Districts, have left, in the wake of their own rock-cut cave-temples in this area (above, p. 147), a few structural temples of stone. An example is the *vimāna* of the Śiva temple at Kiranur (Thiruchchirappalli District) and another perhaps a larger and more interesting temple called in a late Pāṇḍya inscription Vijayālayachoḻīśvaram at Narttamalai near by. The latter was built, according to its foundation-inscription, by a chief called Śattanpūdi and was repaired soon after by another chief, when it was destroyed by a strike of lightning. Perhaps it then got its name after the founder of the Imperial Choḻa line of Thanjavur (*circa* A.D. 850). It is a three-storeyed *vimāna* with a closed *ardha-maṇḍapa* of peculiar plan, standing on the slopes of a hill, surrounded by *asthṭa-parivāra vimānas*, all square on plan except the one on the south for the *sapta-mātṛikās*, which is rectangular, and with a small *gopura*-entrance near the north-east corner of the *enclosure*-wall. The first storey of the *vimāna* has a double wall, the outer square and plain but relieved at intervals and adorned only by pilasters, over a moulded *adhishṭhāna* and the inner circular with a circumambulatory in between. The circular *garbha-gṛiha* opens into the pillared *ardha-maṇḍapa*, which is a smaller square than the main *vimāna*. Two rows of three pillars each divide the *maṇḍapa* into a central nave in front of the shrine-entrance and two lateral aisles in continuity with the closed circumambulatory. The *maṇḍapa* is closed on all sides and has its entrance guarded by two *dvāra-pālas* placed in the niches on either side, enclosed by pilasters. The *hāra* on the square outer wall of the *vimāna* extends over the roof of the *maṇḍapa* in front, as in the Chāḻukyan examples, and contains panels of sculpture illustrating dance-poses. The second

storey, also square on plan, rises over the first storey on four piers built at the corners against the circular wall below and carries a *hāra* on its top. The third storey is circular, carrying a *nandi* at each of the four corners and a circular *grīvā* and circular *śikhara* in the centre. It is a Pallavas-type *vimāna*, since it lacks the *śuka-nāsikā* characteristic of the Chāḷukyan. Like the contemporary temples of the Later Pallavas and the Pāṇḍyas, it carries in the southern niche of its *grīvā* a sculpture of Dakshiṇā-mūrti Śiva—which, with others, became an invariable feature of the southern Śiva temples.

The Western Gaṇgas, who had their capital at Talkad in the southernmost part of Mysore, have left a few contemporary temples, all in hard stone, much resembling their Pallava compeers, differing from them only in details. The earliest, perhaps of the ninth century, is a group of twin single-storeyed Jaina *vimānas* on the Chandragiri hill at Sravana-Belgola (Hassan District). Built of granite, they are of small size, about 2 m. square at the base, standing at either end of a rectangular *adhishṭhāna*, their hind walls extended over the intervening gap and forming a square flat-roofed cell in between. All of them open into a common rectangular *ardha-maṇḍapa*. The *grīvā* and *śikhara* of either *vimāna* are square without a *śuka-nāsikā*. In front of this structure and closing its *ardha-maṇḍapa* façade is a perforated soapstone screen of the twelfth century, containing some fine narrative sculpture in miniature panels. A more impressive structure is the Chāvuṇḍarāya-basti (*circa* 982-95), a three-storeyed *vimāna*; its two lower storeys are functional and contain two superposed *garbha-gṛihas* enshrining Jaina *Tīrthaṅkaras*. The lower storey is surrounded by a double wall, the outer one continued

forward to enclose a coeval closed *maṇḍapa* in front, preceded by a pillared porch added in Hoysala times. The whole structure stands on a moulded *adhisṭhāna*, relieved and recessed on plan as are the walls above. The *hāra* over the *prastara* of the outer wall of the *vimāna*-part, composed of well-formed *kūṭas*, *śālās* and *pañjaras*, is extended over the edge of the *maṇḍapa* roof, also enclosing a narrow open circumambulatory round the second storey and an open court in front of it. The second storey itself with an open circumambulatory, enclosed by the *hāra* of the first storey, carries in turn a *hāra* of four *karṇa-kūṭas* and four *bhadra-śālās*. The third storey, closed on all sides and non-functional, is a smaller square carrying an octagonal *grīvā* and *śikhara* with a *stūpi* as its finial. The *maṇḍapa* is of the *navaraṅga* type, with four polished, but not lathe-turned, central pillars, circular in section, carrying full capitals of the order. The twelve outer ones are of the type found in the cave-temples of the later Pallavas (above, p. 142), square at the base and the top and octagonal in between.

The most interesting monument in the Sravana-Belgola complex is the colossal finely-polished statue of standing Gommaṭeśvara, carved out of a standing tor of granite on the crest of the Indragiri hill. This was the work of Chāvuṇḍarāya, the minister of the Gaṅga king Rāchamalla Satyavākya (974-84). Being free-standing, it is even more interesting than the colossus of Ramses II at Abu Simbel, Eygpt, its total height from head to toe being 17·5 metres. The colossus is surrounded by a pillared cloister of granite built by Gaṅgarāja, the minister of Hoysala Vishṇuvardhana, while the *maṇḍapa* abutting the colossus was built by another minister, Baladeva, in the twelfth century.

The Gaṅga temple at Kambadhalli, which is not far from Sravana-Belgola, is interesting on account of the fact that the original three *vimānas*, built of granite and opening into the three sides of the *maṇḍapa* in *tri-kūṭa* fashion, have respectively a square, octagonal and circular *grīvā* and *śikhara.* There is an open pillared porch in front of the *maṇḍapa* on its northern side. To this complex have been added two more lateral *vimānas* to the front of the porch, connected by a *maṇḍapa* in between. The whole complex is enclosed by a wall with a small *gopura*-entrance in front.

The granite temples at Nandi (Kolar District), the capital of the Bāṇas, are of Gaṅga extraction. The small *vimāna* called Yoga-Nandīśvara on the top of the hill, perhaps the earliest here, is not of much architectural interest. In the large temple-complex at the foot of the hill the two principal *vimānas*, the Bhoga-Nandīśvara and Aruṇāchaleśvara, standing side by side, are supplemented, by a later complex of axial and peripheral structures—*maṇḍapas*, cloisters, enclosures and *gopuras.* Of the two, the Bhoga-Nandīśvara, evidently a renovation in granite of an earlier structure, is more ornate and interesting. The Aruṇāchaleśvara is almost a copy of the former and later in point of time. Both are connected by a screen-wall of the same period in about the middle of their *maṇḍapa*-lengths. The Bhoga-Nandīśvara is a three-storeyed *vimāna*, square from the base to the *śikhara*, with *ardha-maṇḍapa* in front. The *hāra*, of fully-formed *kūṭas*, *śālās* and *pañjaras*, contains fine sculpture and extends over the roof-edges of both the *maṇḍapas*. The second storey too carries the characteristic *hāra* and the third *nandis* of black polished stone at the four corners of its roof and a square *grīvā* and *śikhara*,

the niches on the faces of which contain appropriate sculptures in black polished stone.

11. UNDER THE CHOḶAS

The Imperial Choḷas of Thanjavur succeeded to the hegemony in the south in about the first half of the ninth century after the displacement of the Pallavas and eventually of the Pāṇḍyas. They continued the tradition of temple-building, with many improvements in the technique, use of the hard stones and equally good but more embellished sculpture which became bolder and still later came to be almost in the round. This period marks the peak of temple-building activity, when numerous earlier temples of brick-and-timber were renovated in stone and more were built at all places hallowed either by the visits of Śaiva and Vaishṇava saints or in their laudatory hymns.

A typical early Chola temple-unit is the Sundareśvara at Tirukkattalai (Thiruchchirappali District) It is a complete unit built of stone throughout and consists of the main square two-storeyed *vimāna* with the *ardha-mandapa* surrounded by the *ashṭa-parivārālaya*, all inside an enclosure-wall, with a *gopura* in front The *maṇḍapa* in front of the *vimāna* is a later addition. The temple was built in the time of Āditya I in 873 The main *vimāna* of the Nāgeśvara at Kumbakonam (Thanjavur District) is of the same period and contains exquisite sculpture in its niches. The other parts of the temple belong to later periods.

While these early Choḷa temples and their contemporaries retain the essentials of the Pallava temples, they also show certain transitional features in some components, e.g., the corbels: in most cases

the corbels retain the *taranga*-form with a curved profile but with a hollow moulding in place of the roll at the bend; or alternatively they are plain, angular and bevelled, as in the Pāṇḍya cave-temples (above p. 146).

The Koraṅganātha temple at Srinivasanallur (Thiruchchirapalli District) is an elegant example of the time of Parāntaka I (907-55). It is a square *vimāna* with a *maṇḍapa* in front and contains fine sculpture and rich miniature panels above and below them. Its superstructure, as extant, is of brick.

The great temple in Thanjavur, appropriately called the Bṛihadīśvara (pl. LXVI) or the Rājarājeśvara after its builder Rājarāja I (985-1014), is conceived as a whole complex on a grand scale, completed by its founder and is the most ambitious undertaking of Tamil architecture. It combines all that is mature and best in the temple-building tradition—architecture, sculpture, painting and allied arts. It is a large complex, with an enormous monolithic *nandi* on a pedestal in front, sheltered under a much later *maṇḍapa*. It has the loftiest known *vimāna*, 60 m. high, standing over a basal square of about 30 m. side, which forms an appropriately high and amply-moulded platform, and carries the more boldly-moulded *adhishṭhāna* of the *vimāna*. The same platform and *adhishṭhāna* are extended forward as basal members of the *ardha* and *mahā-maṇḍapas* connected to the main *vimāna* by a north-south transept. The pillared *mahā-maṇḍapa*, with a central nave and two raised aisles, is closed on the sides with the only entrance on the east. The wall of the basal part of the *vimāna* rises vertically to a height of about 15 m. in two storeys, demarcated horizontally at their junction by a bold cornice, and encloses an inner circumambulatory between it

and the inner wall of the *garbha-gṛiha*, which also rises to the height of both the storeys to accommodate the colossal *liṅga* and its great pedestal.

The outer wall is externally relieved five times on each face, as the *adhishṭhāna* below, the central wider ones on the north-west and south sides having large door-openings, one over the other, for both storeys of the circumambulatory. These, in addition to the larger opening on the east, make the *vimāna* a *chaturmukha* structure. The other bays contain niches with different icons in bold relief. The recesses in between are adorned by short pilasters carrying shrine-motifs (*pañjara*-fronts) on the top, the so-called 'decorative pilaster' characteristic of the period. The main pilasters cantoning the corners of the bays and walls are square with full capitals, the abacus as in the earlier Pallava structures, still being large, massive and square, but the corbel-arms are bevelled with a central tenon on their faces. The inner wall of the lower storey has on its three sides more than life-size sculptures of Śiva seated on the south and dancing on the west and of Devī on the north. The lower closed circumambulatory contains over the rest of the walls on either side extensive mural paintings of the Choḷa period, overlaid by later Nāyaka palimpsests of the seventeenth century. The Choḷa paintings form a fine gallery of great artistic merit and iconographic interest. The upper circumambulatory, also closed, contains on the face of its inner wall a series of one hundred and eight panels, all, except the last twenty-seven with completed reliefs, depicting Śiva in the various poses of dance in accordance with Bharata's *Nāṭya-śāstra*.

By a system of corbelling the two walls of the circumambulatory are made to meet each other at

the top level of the third storey, from which point rises the rest of the pyramidal superstructure of the soaring *vimāna* of sixteen storeys, the traditional maximum. Each storey carries *hāras* of *kūṭas*, *śālās* and *pañjaras* and the topmost four *nandis* at the four corners and an octagonal *grīvā* in the centre crowned by an octagonal *śikhara*. On the front side the storeys up to the level of the fifth storey are slightly extended forward over the tiered *ardha-maṇḍapa* below. Internally the *vimāna* is a corbelled hollow throughout up to the base of the *stūpi*.

Enclosing the wide open court around is a two-tiered compound-wall with pilasters at intervals, the tiers themselves being marked off externally by a bold horizontal *kapota*. On the eastern side the compound-wall has a massive but short *gopura*-entrance. Ranged inside the enclosure-wall is a continuous two-storeyed cloister divided by a row of pillars behind the façade-columns into a frontal continuous corridor and a rear section stringing a series of thirtysix two-storeyed sub-shrines. The sub-shrines at the four corners and the middle of each of the three sides are dedicated to the appropriate *dik-pāla*, the eighth finding a place in one of the four shrines in the two tiers flanking the inner end of the eastern entrance. In front of the *gopura* is a second outer and larger *gopura* incorporated into a later fort-wall. In addition to the inner *gopura* on the east, the compound-wall is pierced by three more smaller entrances of the *toraṇa* variety, framed by overdoors with *śākhās* and crowned by horizontal lintels. Just to the north of the transept is a smaller *vimāna* of Chaṇḍikeśvara adjoining the large gargoyle-like water-spout of the main *vimāna*, supported on the head of a squatting *bhūta*, both of which became characteristic of temples from this

time onwards. These were new norms, perhaps set by Rājarāja. The other *vimānas* and *maṇḍapas* inside the court are of later periods, e.g., the Amman shrine to the north of the *nandi*, which is of the late Choḷa period, and the Gaṇeśa and Subrahmaṇya temples on the south-west and north-west, the latter a fine specimen of Nāyaka architecture (below, p. 239).

Apart from sculptures, some of them of immense iconographic interest, paintings and illustrations of dance and music, of which this temple is a unique repository, its long and well-inscribed epigraphs are most interesting and informative of the history of the temple, its builders and donors and the endowments of jewels, bronzes and other parapharnelia.

The Bṛihadīśvara, begun about 1003 and completed by 1010, is the *magnum opus* of the Choḷas. This was closely followed within about twenty years by another magnificent Choḷa structure, also called the Brihadīśvara, built almost on the same plan and model by Rājendra I Choḷa (1012-44), the worthy son and successor of Rājarāja, in his new capital of Gangaikondacholapuram (District Thanjavur), which he founded after his great victories and expeditions to the north up to the Ganga. This temple-complex had only two entrances, a *gopura* on the east and a plain *toraṇa*-door on the north. While a great part of the enclosure-wall, the superstructure of the *gopura* and the entire two-storeyed cloister inside were pulled down in the last century to supply stones for the construction of a neighbouring river-dam, the *vimāna* and its axial *maṇḍapa* are fortunately extant and intact. The *vimāna* is of lesser height and dimensions, with a lesser number of storeys than that of its predecessor at Thanjavur, but the sculpture, bold and almost cut out in the round, is perhaps of greater excellence.

The Rājarājeśvara, now called the Airāvateśvara (pl. LXVII) at Darasuram (Thanjavur District), built by Rājarāja II (1146-73), and the Kampahareśvara at Tribhuvanam (same District), built by Kulottuṅga III (1178- 1223),are examples of the great temples of the later Choḷas, before the later Pāṇḍyas supplanted them by the middle of the thirteenth century. The later Choḷa and the later Pāṇḍya temples, as exemplified by these two, revert to brick-built superstructure over the *vimānas* and *gopuras*, while their basal parts, as also the *maṇḍapas*, axial and peripheral, cloisters and the like, are all of stone. The temples of this and subsequent periods incorporate in their original plan and composition a new and significant addition introduced late in the time of Rājendra I, viz., the *Tirukkāmakoṭṭam* or the Amman shrine. Assigned a defined location in the complex, it is a separate *vimāna*, usually of the *śālā* type, with *maṇḍapas* dedicated to Devī, as the divine consort of the principal god, Śiva or Vishṇu or others as the case may be, the Devī or Amman having a local name in consonance with that of the principal god. From then such Amman shrines have been added to the earlier temples initially without them, e.g., the two Bṛihadīśvaras. The *gopura* or temple-entrance, either singly or in a series, in the front, rear and sides of the enclosure-wall, also becomes a major feature in the composition and attains greater dimensions progressively, so that it overtops the *vimāna*, which from the times of the Pallavas till about 1100 dominated the entire composition. Towards the end of this period, and before the Vijayanagara times, the 'decorative pilaster' adorning the walls of *vimānas* and *gopuras*, as in the *Bṛihadīśvara* and other temples, came to develop bases of *pūrṇa-ghaṭas* or full vases of plenty with

excrescent foliage and are called *kumbha-pañjaras*. The central tenon of the corbel also takes the form of a moulded campanulate pendentive tending to become floral and anticipating the incipient *madalai* of the *pushpa-potika* characteristic of Vijayanagara times. The abacus of the pillar-and pilaster-capitals is thinner in contrast to the large square and thick Pallava and early Choḷa examples. The octagonal *grivā* and *śikhara* of the southern style, which among others were more common in Pallava and early Choḷa times, now become the general norm of the southern temples, though the square and circular styles are occasionally and the apsidal style still more rarely seen.

The Airāvateśvara seems to have had originally more than one enclosure, of which the outer ones except for the outermost *gopura* on the east are now lost. The innermost enclosure with *gopura* in front, with large parts of the double-storeyed cloister inside, is intact. The main axial complex has the same plan as the Bṛihadīśvara, though of lesser dimensions, but more ornate with bold and round sculpture and miniature narrative panels in relief. The larger sculptures are in a new medium, viz. black polished basalt-like stone, in contrast to the granite of the structure. The main *vimāna* rises in five storeys, the upper ones in brick. The closed *mahā-maṇḍapa* has in front an *agra-maṇḍapa* with ornate pillars, open except for the Amman shrine on its north, while on its south is a pillared porch; the whole is designed to simulate a chariot on wheels drawn by elephants.

The Kampahareśvara is very much like the Airāvateśvara including its wheeled porch and its ornate pillars—*chitra-kamba*. In both the cases, the lowermost *hāra* extends over the roof of the *ardha-maṇḍapa*

as in the Chāḷukyan forms. The Amman and Chaṇḍikeśvara shrines, again as in the Airāvateśvara, are coeval with the main *vimāna*. This temple is a veritable gallery of sculptures of varied iconography, including some fine dance-poses. Of the two main *gopuras*, the inner one and the rear one on the west are ruined on the top, but the outer eastern one is complete and is a tall and fine structure characteristic of the times.

The Sundara-Pāṇḍyan *gopura* to the east of the Jambūkeśvara temple at Thiruchchirappalli is a classical example of a Pāṇḍya *gopura*. Other typical late Choḷa and Pāṇḍya *gopuras* are seen in the temples at Chidambaram and Tiruvannamalai. These, with the subsequent Vijayanagara and Nāyaka additions, enlarged many of the south Indian temples, which had started in Pallava and early Choḷa times only with their principal *vimānas* and *maṇḍapas* but now grew in size, as instanced by the Raṅganātha temple at the large temple-city of Srirangam (District Thiruchchirappalli), with its seven enclosure-walls and numerous *gopuras*, *maṇḍapas*, cloisters and *vimānas*.

On either bank of the Kaveri in Thiruchchirappalli District, the Irukkuveḷ chiefs, who were the allies and political subordinates of the early Choḷas of Thanjavur, have left a series of interesting all-stone temples in their capital-city of Kodumbalur. Of them the Mūvar-kōvil is the most interesting from the point of view of architecture and sculpture. It is a complex of three tall granite-built *vimānas* in a row, all two-storeyed and square on plan from the base to the *śikhara*, and with stone *stūpis* and *ardha-maṇḍapas* in front. The central and southern *vimānas* are extant, while the remains of the northern are indicated by the moulded *adhishṭhāna*. There

were a common but detached rectangular *mahā-maṇḍapa* in front and sixteen detached *parivāra*-shrines all round, now represented only by their basements. The complex was enclosed inside a wall with a small *gopura*. The *vimānas* carry on their walls and niches some of the finest early Choḷa sculpture.

12. UNDER THE VIJAYANAGARA RULERS

The Vijayanagara empire, which encompassed practically the whole of the peninsula soon after its advent in the middle of the fourteenth century, in the wake of the early Muslim inroads into the south, continued the tradition left by the later Chāḷukyas, later Choḷas and Pāṇḍyas. In their northern domains, they inherited the traditions of the Chāḷukyas as developed till then under the intervening dynasties, while in the south they took up almost from where the later Pāṇḍyas had left. Thus, their northern temples in the Deccan and Āndhra region retain much that was of the Chāḷukyan inspiration, while their more southern constructions continued the traits of the Pallava-Choḷa-Pāṇḍya architecture. But at all the places they stuck to the hard-stone tradition, carrying it, as it were, from the south to the Chāḷukyan area, which earlier had a predilection for softer stones. In their now-ruined capital at Hampi (District Bellary), there are numerous temples of either variety. Their subsequent capitals and their environs, at Penukonda (Anantapur District), Chandragiri (Chittor District), Vellore (North Arcot District) and numerous other places from the Godavari to Kanniyakumari, contain many more temples, large and small. In fact, their reign witnessed a greater activity in temple-building than

there had been in the times of the Choḷas, and some of their temples are remarkable for the great size of their component structures—*maṇḍapas* and *gopuras*. The pillars and pilasters have now more elegant shafts, the lower part of the abacus, which was a plain *doucene* in the Pallava and early Choḷa periods and got scalloped into petals in the later Choḷa, develops still more into a floral form with the petals—*idaḷ*; the corbel or *potika* has evolved into the characteristic *pushpa-potikā*, with a double-flexed arm extending from the main block and scalloped at the free-hanging extremity into everted petals with an incipient bud or torus hanging at the centre. The flexed arm has a straight horizontal bar connecting its free tip with the main block. The *kumbha-pañjara* in all its elaboration becomes another characteristic feature of the Vijayanagara and later temples. The cornice, till now thick and curved down, becomes larger, thinner and with a double flexure extending far forward and often with monolithic stone chains hanging from the corners, as in the *kalyāna-maṇḍapa* in the Varadarāja temple at Kanchipuram. Such *kalyāṇa*-and other *utsava-maṇḍapas* are halls for the celebration of temple-festivals, with fine and intricately-worked colonnade, often with attached small pillars or animal and human sculpture—the *aṇiyoṭṭikkāl*. The Vijayanagara contribution to pre-existing temples was mainly in the form of tall and massive *gopuras*, called *rāya-gopuras*, some times as many as eleven storeys high, as in the Ekāmra-nātha temple at Kanchi, and in the temples at Tirivan-namalai (North Arcot District) and Kalahasti (Chit-toor District), built by the great emperor Kṛishṇa-deva Rāya (1509-29).

Among the many large Vijayanagara temples at Hampi, such as the Pampāpati and Virūpāksha,

which started from a late Chāḷukyan nucleus, and the Paṭṭābhirāma, the Hazāra-Rāma and Viṭṭhala, the last two may be taken as examples of wholly Vijayanagara structures, one with Chāḷukyan traits and the other predominently of the more southern type.

The Hazāra-Rāma temple had probably been begun earlier and was completed by Kṛishṇadeva Rāya. The temple is devoid of the characteristic *gopura*. The *mahā-maṇḍapa* is of the pattern of the Chāḷukyan *navaraṅga*, with its four central pillars, though square, polished and embellished with sculpture and carvings. The walls of the main *vimāna*, as also those of the adjoining Amman shrine and the enclosure, are replete with panel-sculpture. More characteristic is the *śuka-nāsikā* in front of the superstructure.

The Viṭṭhala temple (pl. LXVIII), a large complex planned and built at one time, is typical of the southern form of *vimāna* temples with axial additions of *maṇḍapas* including the *agra-maṇḍapa* with composite columns and peripheral *maṇḍapa*, sub-shrines and *gopuras* including a *Garuḍa-maṇḍapa* in front of the court, which is a *vimāna* fashioned in the the form of a chariot with stone wheels.

13. UNDER THE NĀYAKAS

After the fall of the central power the Vijayanagara viceroys in the southern regions, called Nāyakas, assumed independent powers at Gingee, Thanjavur and Madurai in Madras State and Ikkeri in north-west Mysore. Of these the Madurai and Thanjavur Nāyakas have perhaps contributed more to temple-building and other structural activity than the other two lines. The Nāyakas added elaborate

maṇḍapas of the hundred-pillared type and larger *gopuras* with a greater number of plastic stucco figures, as at Vellore (pl. LXIX) and Madurai, their tallest *gopura* being at Srivilliputtur (Ramanathapuram District). The closed *prākāra* or ambulatory flanked on either side by massive columns, with elaborately-corbelled brackets spanning the gap above and nearly meeting each other, built in the Nāyaka and later times, is exemplified by the well-known corridor in the temple at Rameswaram (District Ramanathapuram). The fine *kalyāṇa-maṇḍapa* at Vellore and a similar *maṇḍapa* in the northern *prākāra* of the Srirangam temple (pl. LXX) with the façade-columns carrying full-size monolithic sculptures of rearing horses with riders and retinue and other animal figures, are the notable contribution of the Nāyakas. Much of the large temple-complex at Madurai is of Nāyaka origin, including the great *maṇḍapas* and towering *gopuras* on all the four sides. The Subrahmaṇya temple, a fine *vimāna* with *ardha*-and *mahā-maṇḍapas*, standing in the north-west of the court of the Bṛihadīśvara temple at Thanjavur (above, p. 232), is a typical example of the Nāyaka temple of the ornate variety. Built of fine-grained granite it exhibits in the mouldings of its *adhishṭhāna* and the pilasters of its wall some intricate and chased work. It has the characteristic *pushpa-potika*, the *kumbha-pañjara* and the double-fiexed cornice, in addition to other typical features. These temples form the pattern for the living art of the modern temple-builder or *sthapati* of south India.

14. THE WEST COAST

The temples of Kerala and the west coast in general, though essentially similar in parts to the

southern temples, are adapted to the high rainfall and make use of the timber which is plentiful in the region. While the *adhishṭhāna* is built of moulded stone, the walls are mostly of laterite blocks. The roof is supported by timber-beams and joists, and the roofing was originally of laminated overlapping, so to say clinker-built, wooden planks; it is this very system that has been imitated in the stone copies where stone slabs are made to overlap one another in the sloping roof, as in the Lād-Khān and other temples at Aihole and the temples of Konkan and Kanara (above, p. 193). While in many other cases the roof is tiled, in still others the roofing was of copper or brass sheeting. The usual plans—square, rectangular, circular and apisdal—are met with, and in simple cases the roof or *śikhara* comes directly over the walls, without an intervening *prastara* or *grīvā*, seen in the Pallava Draupadī-ratha at Mahabalipuram (above, p. 149). Where the *vimāna* is storeyed, the system of concentric walls rising to the respective heights, as is seen in the Dharmarāja-ratha at Mahabalipuram (p. 149) and the Vaikuṇṭha-perumāḷ at Kanchi (p. 219), is adopted, with sloping and not horizontal roofs over the various ambulatories. Alternatively, a system of pent roofs at different heights on the walls, held by brackets sprung from the wall, is followed. The *nāsikās* (gables or dormers) are generally of a triangular shape, though examples of the vaulted type, with the front masked by a *toraṇa*-arch locally known as *kiḷivāśal*, are also known. Many of the Kerala temples contain interesting mural paintings of the seventeenth to nineteenth centuries.

K. R. SRINIVASAN

ISLAMIC MONUMENTS[1]

CONTENTS

[1]For places mentioned in this chapter see map, fig. 5, p. 328.

1. MUSLIM INVASION OF INDIA

COMMERCIAL INTERCOURSE BETWEEN INDIA AND Arabia had existed earlier, but it was early in the eighth century that the Arabs conquered Sind and established some small principalities there. In the closing years of the tenth century Maḥmūd of Ghazni invaded India for the first time and repeated his expeditions several times, plundering cities and temples, including the famous temple of Somnath in Gujarat. The Rajput rulers of northern India, who opposed him, were all vanquished by him. But during the reign of his successors, not only did India slip out of their hands, but their control over Ghazni itself became weak and it came under the sway of the princes of Ghūr, a province between Ghazni and Herat.

In 1175, Muḥammad, brother of Ghiyāthu'd-Dīn Sultan of Ghūr, invaded Multan and gradually annexed Sind and Panjab, the latter from the descendants of Maḥmūd of Ghazni. In 1191 he made a powerful thrust into India, which was repulsed at the famous battle of Taraori by a confederacy of Rajputs under the Chauhān prince Pṛithvīrāja. In the following year, however, Pṛithvīrāja was captured and slain by Muḥammad Ghūrī on the same battlefield.

Muḥammad then retired, leaving the campaign in the hands of Qutbu'd-Dīn Aibak, his favourite slave from Turkestān. Qutbu'd-Dīn occupied Delhi, Pṛithvīrāja's capital, and soon swept across Kannauj, Gwalior, Gujarat, Bihar, Bengal and Bundelkhand. At the death of Muḥammad in 1206, Qutbu'd-Dīn enthroned himself at Lahore as the first Sultan of Delhi.

2. MAIN FEATURES OF INDO-ISLAMIC ARCHITECTURE

The conquest of India by the Muslims made an effective and distinct impact on the indigenous expressions of life and culture, which gave rise, among other expressions of art, also to a new style in architecture. This style incorporated not only certain new modes and principles of construction but reflected also the religious and social needs of the adherents of Islam.

In the Brāhmaṇical, Buddhist or Jaina constructions, spaces were spanned either by beams or by courses of bricks or stones laid in corbels, so that the open span was gradually reduced to a size which could be covered with a single slab. Although there exists some evidence to suggest that the true arch may have been known in India earlier, it is the Muslims who are believed to have brought with them the principle of building a true arch, so that the bricks or stones could be laid as voussoirs to reproduce a curve and thus span the space between columns or walls. In any case, even if the true arch was familiar to indigenous architects in ancient times, it was re-introduced by the Muslims and firmly implanted on the soil. The result was that flat lintels or corbelled ceilings were replaced by arches or vaults, and the pyramidal roof (*pīḍhā*) or spire (*śikhara*) by the dome. The necessity of raising a round dome over a square construction introduced multiplication of sides and angles by providing squinches, so that a base with many sides, usually sixteen, could be obtained to raise a circular drum for the dome. A sunshade or balcony was laid on cantilever brackets fixed into and projecting from the walls, which introduced the *chhajja* (eaves or sunshade). Brackets

with richly-carved pendentives, described as stalactite pendentives, lent them fascinating ornamentation when they were intended to serve as balconies. Kiosks (*chhatrīs*), tall towers (*minārs*) and half-domed double portals are some of the other distinguishing features of Indo-Islamic architecture.

The difference between the lay-out of a temple and a mosque is explained by the essential difference between the Hindu and Muslim forms of worship and prayer. A cella to house the image of the deity *garbha-gṛiha*), and often small halls in front for the worshippers (*maṇḍapa*), were regarded adequate for a simple Hindu temple. But the Islamic form of worship, with its emphasis on congregational prayer, requires a spacious courtyard (*siḥn*) with a large prayer-hall at its western end. In the rear wall of the prayer-hall, the centre is occupied by a recess or alcove, called *miḥrāb,* and indicates the direction of prayer (*qibla*). A pulpit (*mimbar*) to its right is meant for the *Imām* who leads the prayer. A tower or minaret, originally intended for the *mu'azzin* to call the faithful to the prayer, later assumed a mere architectural character. A gallery or compartment is sometimes screened off in a corner of the prayer-hall or in some other part to accommodate the ladies who observed *purdah*. The main entrance to a mosque is on the east, and the sides are enclosed by cloisters (*liwāns*). A tank is provided for ablutions usually in the courtyard of a mosque.

The practice of the burial of the dead, as distinct from cremation practised by the Hindus, introduced the tomb. A domed chamber (*ḥujra*) with a cenotaph (*zarīḥ*) in its centre, a *miḥrāb* in the western wall, and the real grave (*qabr*) in an underground chamber (*maqbara*) constitute the essential elements of a tomb. In larger and more complex tombs,

there is also a mosque, and in later tombs a well-planned garden. The entrance to the mortuary-chamber is usually from the south.

The mode, theme or motifs of ornamentation employed in Islamic buildings also made a departure from the earlier Hindu vogues. The indigenous ornamentation is largely naturalistic, delineating with a conspicuous zest human and animal forms and the luxuriant vegetation-life characteristic of a tropical country. Among the Muslims the representation of living beings was forbidden by scriptural injunction, and so they took recourse to execution of geometrical and arabesque patterns, ornamental writing and a formal representation of plant and floral life, reflecting in its scantiness the nature of the country where Islam was born.

Lucidity and simplicity of expression, economic use of material and orderly arrangement characterize the Islamic art, as distinct from the exuberance, richness and exaggeration of Hindu art. The ornamental designs in Islamic buildings were carved on stone in low relief, cut on plaster, gilded, painted or inlaid. Muslim ornamentation even on stone or other base in effect is not much different from embroidery. Striking colour-effect was often obtained by encaustic enamel on tiles.

Lime was known earlier in India, but its use was very limited, mud being used for brickwork, while large blocks of stone were generally laid dry and secured with each other by means of iron clamps. The Muslims, on the other hand, made an extensive use of lime, which served not merely as a binding-medium, but also as plaster and a base for incised decoration and encaustic enamel-work.

After the initial reaction manifesting itself in the desecration, destruction and spoliation of the

earlier Hindu structures the creative monumental activity of the Muslims is marked by two phases. In the first phase, the earlier Hindu temples or other buildings were purposefully demolished and the material used for new improvised buildings. In the later phase, mosques, tombs and other buildings were thoughtfully planned and built with appropriate material, which was originally quarried, manufactured or ornamented as necessary. It is in this phase that Muslim buildings are found at their best.

Indo-Islamic architecture falls under three broad phases. The monuments erected by or under the patronage of the Delhi Sultans belong to the first phase. Contemporaneously, at least in part, monuments were also coming up in the different provinces, which were originally ruled by governors appointed by the Sultans, but which soon declared themselves independent. These exhibit a diversified but distinct phase. To the third phase belong the constructions of the Mughals, who brought India again under an almost united suzerainty.

3. MONUMENTS OF THE DELHI SULTANS

From Qutbu'd-Dīn Aibak's rise till the conquest of India by the Mughals, five main dynasties ruled from Delhi. Rulers of these dynasties raised a large number of buildings, which make it possible to view the development of Islamic architecture in India as a growing and continuous movement.

A. The Mamlūk Dynasty (1206-90)

Most of the important buildings of the Mamlūk (or Slave) dynasty, with the only important exception

of the Aṛhāi-Din-kā-Jhonpṛā mosque at Ajmer, were erected at Delhi. In their iconoclastic zeal the Mamlūk conquerors laid the Hindu temples waste, but in spite of their knowledge of their characteristic principles of construction, which were to exercise a far-reaching effect in course of time, they were confronted with a lack of workmen familiar with their methods. The result is that a sense of uncertainty and improvisation permeates through the buildings of the Slave dynasty, some of which have, in fact, been built with architectural material from demolished Hindu temples. The use of architrave, lintel or corbelled courses continued, and, in fact, the hand of Hindu craftsmen is particularly apparent in surface ornamentation. Although a homogeneous principle of construction and ornamentation is lacking in these buildings, the product is often marked by grace and strength.

In the centre of the Rajput citadel of Lāl-Koṭ at Delhi, which was occupied by Qutbu'd-Dīn, and which with its extension into the later Qal'a Rāi Pithora is known as the first city of Delhi, he demolished twentyseven Hindu and Jaina temples, and with their carved columns, lintels, ceiling-slabs and other members raised regular cloisters to enclose a rectangular area, which was named the Quwwatu'l-Islām ('Might of Islam') mosque and completed in 1197. After a short time he threw a massive stone screen in front of the prayer-chamber along the western wall. This imposing screen with five graceful arches, the central one being the highest, is not built on the true arch principle but by corbelling the successive courses, although there is a faint attempt to lay the stones in the fashion of voussoirs near the apex of the arch. In the ornamentation of this screen with its serpentine tendrils and undulating leaves, the

hand of craftsmen used to Hindu motifs is clearly perceptible.

An iron pillar, 7·20 m. high and 32 cm. to 42 cm. in circumference, stands in the courtyard of the mosque. It was, however, brought to Lāl-Koṭ, according to bardic tradition, by Anangpāl, the Tomar prince who built the citadel. An inscription on it, engraved in characters of the fourth century, proclaims it to be the lofty standard of god Vishṇu, erected by a mighty king named Chandra, who is surmised to be Chandragupta II of Gupta dynasty. With only traces of corrosion on the portion covered under the ground , this pillar, manufactured sixteen hundred years ago, is an eloquent tribute to the metallurgists of those days.

In the last year of the twelfth century Qutbu'd-Dīn laid the foundation of the Qutb-Minār (pl. LXXI), which was finally completed by his son-in-law and eventual successor, Iltutmish (1210-35). It was raised possibly both as a tower of victory and as a *minār* attached to the mosque. Originally the *minār* had four storeys, the uppermost of which was damaged by lightning in 1378 but was rebuilt by Fīrūz Shāh Tughluq (1351-88) in two storeys. With its projecting balconies carved with stalactite decoration on the underside, inscriptional surface-carvings and variegated flutings this 72·5 m. high *minār* with three hundred and seventy-nine steps, is the highest stone tower in India.

Iltutmish enlarged the Quwwatu'l-Islām mosque by extending the great screen on either side and by raising an enclosure of colonnades outside the original courtyard. The arches of his screen are still trabeate, although their arabesque ornamentation is Saracenic. as distinct from the mixed decoration of Qutbu'd-Dīn Aibak's screen. His tomb, square

on plan, but with its dome no longer in existence, stands to the north-west of the Quwwatu'l-Islām mosque. It is plain on the outside, but profusely carved with inscriptions and geometrical designs on the inside, recalling the Hindu ideal in its richness.

Another early mosque, built from the dismantled remains of Hindu temples, is at Ajmer. It is known as Aṛhāi-Din-kā-Jhonpṛā, ('hut for two-and-a-half days'), possibly from the fact that a fair used to be held there for two-and-a-half days. It was commenced by Qutbu'd-Dīn about 1200 and was laid on the same plan as the Quwwatu'l-Islām mosque, with carved pillars used in colonnades. Its prayer-chamber, the carved ceiling of which rests on pillars raised in three tiers, is faced by a thick screen carved with effective decoration and pierced by corbelled but engrailed arches, which appear here for the first time (pl. LXXII).

The first example of a monumental Muslim tomb in India, called Sultan Ghārī's tomb, however, lies about four miles west of the Qutb. It was built in 1231 by Iltutmish over the remains of his eldest son and heir-apparent, prince Nāsiru'd-Dīn Maḥmūd. Laid out within a walled enclosure with bastions on corners, which impart it the look of a fortress, its octagonal grave-chamber lies underground, as the level around it was raised by a rubble-packing. The ceiling rests on columns raised with two pillars each robbed from an earlier Hindu shrine; carved lintels from another were found embedded in the thick lime-concrete roof. Other pieces were used in the ceilings of the prayer-chamber and bastions and the pillars re-utilised in the verandahs, originally used as a *madrasa*, after chipping the decoration off them. The tomb was repaired later by Fīrūz Shāh Tughluq.

Nāsiru'd-Dīn, the last Sultan in Qutbu'd-Dīn's line, left the affairs of state to Ulugh Khān Balban, originally one of Iltutmish's slaves and now father-in-law and minister of Nāsiru'd-Dīn. In the absence of an heir, Balban succeeded Nāsiru'd-Dīn in1266. Balban's tomb, lying not far from the Qutb, is built with rubble stone, and consists of a square chamber with arched openings on all the four sides. It is now without a dome and in a dilapidated condition, but occupies an important position in the development of Indo-Islamic architecture, as we find here for the first time the use of a true arch.

B. The Khaljī dynasty (1290-1321)

Fīrūz Shāh, an Afghanized Turk of Khaljī tribe at the Delhi court, captured the throne from Shamsu'd-Dīn Kaimurth, one of Balban's successors, in 1290 and assumed the title of Jalālu'd-Dīn Khaljī. Among the six rulers of Khaljī dynasty, the third in the line, 'Alāu'd-Dīn, ascended the throne in 1296 and is well known, not only for his political exploits, but also for his architectural ambitions and achievements. This was just the time when the empire of the Saljuqs in western Asia was breaking up under the incessant inroads of the Mongols, and poets, artists, architects and craftsmen under their employ were taking shelter in neighbouring lands. Some of them, no doubt, resorted to the Delhi court, and brought with them Saljuqian architectural tradtions which resulted in such characteristics in Khaljī buildings as the 'spear-head' fringe on the underside of the arch, ornamental bosses in relief in spandrels and alternating courses of narrow 'headers' and wide 'stretchers' on the masonry-face. The initial phase of experimentation and improvisation in

Islamic architecture was now over, and it developed its own methods and idioms. Employment of the true arch, mostly in the form of a pointed horseshoe, broad dome, recessed arches under the squinch, perforated windows, arabesque low reliefs, inscriptional bands and use of red sandstone relieved by marble are some of the other features which characterize Khaljī architecture.

'Alāu'd-Dīn extended the Quwwatu'l-Islām mosque in Delhi by enlarging its enclosure of colonnades. He built two gateways on the long eastern side and one each on the north and south, among which only the last one, called the 'Alā'ī-Darwāza, has survived in entirety. Here the 'spear-head' fringe on the underside of a horseshoe-shaped arch appeared for the first time and the monotone of red sandstone was relieved by inscribed marble bands. 'Alāu'd-Dīn also commenced building another *minār* within the northern half of the extended Quwwatu'l-Islām mosque, but he had hardly raised the tower to its first storey, when death overtook him. He had doubled the size of the mosque, and his *minār* was also intended to be twice the size of the Qutb-Minār. His tomb lies to the south-west of the mosque, along with the remains of a *madrasa* or college.

In 1303 'Alāu'd-Dīn laid the foundations of Sīrī, which was the second city of Delhi, but the first to be originally built by the Muslims. It is now represented only by stretches of its thick stone walls provided with flame-shaped battlements, which appeared here for the first time.

During 'Alāu'd-Dīn's reign his son Khizr Khān is said to have built the Jamā'at-Khāna-Masjid, which lies close to the tomb of Hazrat Nizāmu'd-Dīn Auliyā. Its red sandstone facing, low dome, 'spear-head' fringe of arches, recessed squinch arches,

frames of Quranic inscriptions and arrangement of alternating wide and narrow courses are features which are common with the 'Alā'ī-Darwāza.

C. The Tughluq dynasty (1321-1414)

The last of the Khaljīs, 'Alāu'd-Dīn's third son, Qutbu'd-Dīn Mubārak Shāh, was killed by Khusraw Khān, a low caste Hindu convert in Sultan's favour, later appointed by him as his chief minister. Ghāzī Malik, a Turk noble of the Tughluq tribe, who was then governor of Debalpur in Panjab and whose loyalty to his Khaljī overlords was unbounded, marched against Khusraw Khān and beheaded him. There being no male survivor from the house of the Khaljis, he was proclaimed king in 1321 under the title of Ghiyāthu'-Dīn Tughluq.

Among the eleven rulers of the Tughluq dynasty, who reigned in succession, only the first three were interested in architecture and added a new capital-city each in Delhi. Under the Khaljīs Islamic architecture had begun to acquire a standard grace and ornament and a preference for an appropriate use of red colour to relieve the grey, drab surfaces. But with the puritanical Tughluqs the order changed. Their buildings are distinguished by plain and austere surfaces of grey stone, cross-vaults over large halls, battered walls and bastions, the latter particularly on the quoins, four-centred arches and lintels above openings. The battered construction, a necessity in thick walls of mud or bricks (but not in stone), may have been borrowed by the Tughluqs from Sind, Panjab or even Afghanistan, where mud or brick was in use.

The element of reduced ornament in the Tughluq buildings shows them to an advantage. Inscribed

borders and medallions in spandrels, often executed on plaster or stucco, obtain an extremely effective result. The drab look of the plain mass was further relieved by encaustic tiles, which appear to have been introduced now for the first time.

The Tughluqs were also interested in impounding rain-water for irrigation by erecting bunds and embankments, and some of these have survived to this day. Ghiyāthu'd-Dīn Tughluq (1321-25) built the fortified town of Tughluqābād, the third city of Delhi. With its battered walls of grey rubble perched on desolate hills, where its position gives it a natural advantage, Tughluqābād was raised as a stronghold rather than as an architectural enterprise. It is in two parts, the citadel and palaces along the southern walls forming one unit and the city to the north the other. On plan it is an irregular rectangle with over 6 km. of fortification. The citadel is still intact, and the walls of palaces can also be discerned. The city-portion is, however, in extreme ruins, although one may make out the alignment of some of its streets.

Across the main entrance of Tughluqābād on the south is Ghiyāthu'd-Dīn's tomb. Faced with red sandstone relieved by marble, and with batter on exterior, it is enclosed within high walls forming an irregular pentagon. With a 'spear-head' fringe on the underside of its arched openings on three sides and its colour-scheme, it still retains some of the characteristics of Khaljī architecture. But its arch, with an ogee curve at the apex recalling the 'Tudor' arch, a slightly-pointed 'Tartar' dome and the use of beam-and-arch for openings are new features. Originally it stood within an artificial reservoir and was connected with Tughluqābād by a causeway, now pierced by the Qutb-Badarpur

road. The sluice-gates of the vast reservoir are to be seen to the north of the main road close to the massive embankment between the northern and southern spurs of the hills.

Ghiyāthu'd-Dīn's successor, Muḥammad Tughluq (1325-51), added the small fortress of 'Ādilābād on the hill south of Tughluqābād, with which it shares the main characteristics of construction. He also raised the fourth city of Delhi, Jahānpanāh, which largely comprised a walled enclosure between Qal'a Rāi Pithora and Sīrī in order to afford protection to his subjects living there. Only some stretches of these walls are now extant. A unique monument which formed part of Jahānpanāh is a bridge, called Sātpula, consisting of a weir with seven main and four subsidiary arched openings with a tower at each end.

Muḥammad is well-known in Indian history for his idiosyncratic move in transferring not merely the capital but also the entire population of Delhi to Daulatabad in the Deccan, which had earlier been known as Devagiri. It is a natural citadel (as it lies on a conical hill), the sides of which were cut steeply in earlier times. Muḥammad constructed two ashlar-enclosures of defences here, one within another, with the Devagiri hill on the north-west serving as a citadel and the innermost enclosure.

After Muḥammad came Fīrūz Shāh (1351-88), who was fond of history, hunting, irrigation and architecture. He founded the towns of Hissar, Fatehabad, Jaunpur and Firuzpur (near Budaun). In and around Delhi, apart from raising new buildings, he also repaired old ones, such as Sultan Ghārī's tomb (above, p. 249), Qutb-Minār (p. 248) and Sūraj-Kunḍ, a reservoir near Delhi, built by Hindu kings. Two inscribed stone columns of Aśoka, one from

Topra near Ambala and the other from Meerut, both undeciphered, were brought by him and erected in Delhi, the former in his new capital and the latter on the ridge near his hunting-palace, popularly known as Pīr-Ghaib. Series of low domes over mosques and stone railings around a terrace or open courtyard are some of the new architectural features introduced in his reign.

His new capital, called Fīrūzābād, the fifth city of Delhi, now known as Koṭla Fīrūz Shāh, is a large enclosure of high walls, which then lay along the river. With an entrance through a barbicaned main gate on the west, it contained palaces, pillared halls, mosques, a pigeon-tower and a *bāolī* (stepped well) some of which are still in good condition. The main public mosque, Jāmi'-Masjid, has a spacious courtyard, the whole structure resting on a series of cells. It is, however, a pyramidal structure with a diminishing covered area in each successive storey, on the top of which, within a stone-railing, the Aśokan column is planted, that strikes as a unique edifice.

Fīrūz Shāh built several hunting-lodges in and around Delhi, some of which, such as Mālcha-Maḥal, Bhūlī-Bhaṭiyārī-kā-Maḥal and Pir-Ghaib, lie on the ridge.

The Ḥauz-i-'Alā'ī, a large reservoir which had been built earlier by 'Alāu'd-Dīn Khaljī to feed his capital Sīrī and which is now in ruins, was restored by Fīrūz Shāh, and, on its south-western corner, long halls in two storeys, laid to serve as a *madrasa* or college. This place is now known as Ḥauz-Khāss and includes the tomb of Fīrūz Shāh, a lofty structure with an impressive dome and a front yard enclosed within stone railings.

During Fīrūz Shāh's reign several mosques were raised in Delhi. Khān-i-Jahān Jūnān Shāh, son of

a father bearing the same title of Khān-i-Jahān, who was a Hindu convert and became prime minister of Fīrūz Shāh, is credited with having built seven mosques, some of which are Kalān- or Kālī-Masjid within the city near Turkmān Gate, another Masjid of the same name in Nizamuddin, Kālū-sarāi-Masjid, Khiṛkī-Masjid and Begampurī-Masjid. The mosques in the city and Nizamuddin bear an inscription and are definitely built by the son: whether the builder of others is the father or the son is not certain. All these mosques are characterized by eaves or *chhajjas* supported on brackets, series of low domes and sloping *minārs* on corners and at the entrance. The courtyards of the Khiṛki-Masjid and Kālī-Masjid in Nizamuddin are divided into squares, some of which are roofed and others left uncovered to admit light.

In Nizamuddin also lies the tomb of Khān-i-Jahān Tilangānī, who was perhaps no other than the prime minister of Fīrūz Shāh himself. The tomb consists of an octagonal chamber coverd by a dome and enclosed by a verandah, each side of which is pierced by three arches. This is the first tomb in this style in Delhi, which later became the hallmark of the Sayyid and Lodī architecture.

During the reign of Ghiyāthu'd-Din II (1386-89) was built, near the village of Chiragh-Delhi, the tomb of Shaikh Kabīru'd-Dīn Auliyā, popularly known as Lāl-Gumbad. Its walls have a batter, and it is faced with red sandstone, thus simulating Ghiyāthu'd-Dīn Tughluq's tomb. But its small size, conical dome and other weak features only indicate that it is an inferior copy of its prototype.

After the death of Fīrūz Shāh Tughluq in 1388, the Sultanate was politically unstable, and each of his successors could retain the throne only for a

brief period. In 1396, Nusrat Shāh, one of Fīrūz Shāh's grandsons, usurped the throne from Maḥmūd Tughluq, although the latter managed to return to the throne in 1399 after Nusrat Shāh's murder. Tīmūr invaded India in 1398 and plundered and devasted the town of Delhi. He retreated next year, but the country could not recover, with nobles and provincial governors warring against each other and against the Sultan. With this kind of political unstability and the effect of Tīmūr's invasion, the architectural activities in the country came almost to a dead-stop.

D. The Sayyid dynasty (1414-44)

After Maḥmūd's death in 1413, the nobles transferred their allegiance to Daulat Khān Lodī, who, however, was attacked and taken prisoner by Khizr Khān, governor of Panjab, in 1414. Khizr Khān ascended the throne and founded the socalled Sayyid dynasty. Four rulers of this dynasty reigned in succession till 1444, but the country knew no prosperity. There was no patronization of arts or architecture. No cities, palaces or mosques were built, as during the rule of earlier dynasties. Only tombs were raised over the dead.

Yet some of these tombs are architecturally important. There were two designs in them, octagonal and square. The former style had made a beginning during the Tughluq period with the tomb of Khān-i-Jahān Tilangānī (above, p. 256). The latter came to have a distinct elevation, with the façade divided by a string-course and with series of panels of sunk niches above and below it giving it the semblance of two or three 'storeys'. In these tombs, the central portion of each side projects to

form a vertical rectangle, within which the main arch, with a beam-and-bracket entrance and a small open window above it, covers almost the entire height of the wall. The sides of the rectangle and corners of the structure are provided with pinnacles (*guldastas*). One arch on either side of the entrance is open to admit light, but the others, like those on the second 'storey', are false and closed. The height of these square tombs is greater than that of the octagonal ones, although the latter cover a wider area on ground plan.

Unfortunately the persons buried in most of these square tombs remain unidentified, and there exists an impression that they contain the remains of nobles, while the kings were buried in octagonal ones. On the other hand, it seems likely that the square plan became popular in the Lodī period, as the first inscribed tomb of this design, the tomb of Mubārak Khān, popularly known as Kāle-Khān-kā-Gumbad, is dated to 1481 during the Lodī rule.

Khizr Khān's son and successor, Mu'izzu'd-Dīn Mubārak Shāh is said to have founded a city called Mubārakābād along the Yamuna, but no trace of it now remains. He died in 1434, and lies buried in Kotla-Mubarakpur at Delhi. His tomb, octagonal on plan, with a central chamber and verandahs all round, each side pierced by three openings, is typical of this style. Originally it was enclosed within a large octagonal enclosure. Its wide dome rises from a sixteen-sided base, each corner provided with a pinnacle, and the top of the dome being surmounted by a lantern. The centre of each side is occupied on the roof by a pillared octagonal kiosk (*chhatrī*), and each corner is provided with a sloping buttress in the Tughluq style. With its low and wide dome, and with the same contours repeated on the

domes of the *chhatrīs*, the whole structure looks stunted.

The tomb of Muḥammad Shāh (died in 1444) lies in the Lodī gardens. It is also built on an octagonal plan, but here the drum is raised, and so is the height of the *chhatrīs*, with the result that it is a much more impressive structure than Mubārak Shāh's tomb.

E. THE LODĪ DYNASTY (1451-1526)

During the reign of Muḥammad Shāh Sayyid (1434-44), Buhlūl Lodī, the Afghan governor of Sirhind, had extended his influence through Panjab and had become almost independent. 'Alāu'd-Dīn 'Ālam Shāh, Muḥammad Shāh's son and successor, retired to Budaun, leaving the governorship of Delhi to one brother-in-law and the superintendence of the city-police to another. The two, however, fell apart, and in 1451 Buhlūl Lodī captured the throne, although initially he professed to reign on behalf of 'Ālam Shāh.

Buhlūl (1451-89) brought some kind of order on the political scene, but was engaged largely in subduing the provincial kingdom of Jaunpur and other chiefs. His successors, Sikandar and Ibrāhīm, remained likewise engaged. Under such circumstances there existed no impetus for raising new buildings; and all that the Lodis left are some tombs in the two styles that had come into vogue during the Sayyid period. The simplest octagonal tomb is an open pillared pavilion, and a large number of them are found all over Delhi. But even the elaborate design continued to be followed till the reign of Akbar, although by then the royal tombs had come to have a different design. There are several

tombs of the square variety in Delhi, a large number of them scattered between Ḥauz-Khāss and Kotla-Mubarakpur, but the identity of the persons buried in them is not known. The Shīsh-Gumbad in the Lodī gardens at Delhi follows the pattern described earlier (p. 258). It was decorated with glazed tiles, from which it derives its present name, meaning 'dome of glass'.

Buhlūl Lodī's tomb in Chiragh-Delhi is a poor square structure, each side broken by three arched openings and the roof surmounted by five domes. Sikandar (1489-1517) lived at Agra and raised some buildings at the place which acquired from him the name of Sikandara. No remains of these buildings, however, remain. It is, however, his tomb in Delhi which exemplifies the final phase in the evolution of the octagonal tomb The tomb proper possesses the same features as Muhammad Shāh's tomb, except that the *chhatrīs* on its sides are now missing. It stands within a large square garden enclosed by high walls, provided with a wall-mosque on the west, octagonal towers on the corners and an ornamental gateway on the south. The mosque and garden enclosure are features which later became characteristic of the Mughal tombs and assign to it a transitional position between the earlier fortified tombs and the spacious garden mausoleums of the Mughals.

Two mosques built in Delhi during the rule of the Lodis deserve mention, as certain features, which developed into important characteristics in the Mughal period, are found introduced here for the first time. The prayer-chamber of the Baṛā-Gumbad mosque in the Lodi gardens, built in 1484, is divided into five bays and is surmounted by three domes, resting on corbelled pendentives, the end bays being

roofed by low vaults. Its façade is broken by five arches of almost equal height but unusual shape. At the rear, oriel windows project from the ends and the centre; and the external angles and the *miḥrāb* bay are strengthened by sloping buttresses. The entrance to the courtyard was through an imposing domed gateway, now known as Baṛā-Gumbad, which has 'double-storeyed' façades. The mosque is profusely ornamented with foliage and inscriptional decoration and coloured tilework.

The Moṭh-kī-Masjid built by Miyān Bhoya, a minister of Sikandar Lodī, is raised from a platform faced with cells. Built of ashlar grey stone, its prayer-chamber is also faced with five graceful arched openings, the central one being the highest, and each fitted with tiled medallions in the spandrels. The central bay and the end ones are domed. The central dome is supported on squinch niches, and the side ones on corbelled pendentives. Like the Baṛā-Gumbad, it has sloping buttresses flanking the rear projection, double-storeyed corner-towers at the rear and oriel windows. On the two corners of the eastern compound-wall, there are octagonal domed *chhatrīs* to match with the rear towers. The central *miḥrāb* of the prayer-chamber is built with red sandstone and bordered with inscriptions from the Quran, while its ceiling is decorated with plaster-work.

During the later part of his reign Ibrāhīm Lodī (1517-26) became particularly suspicious and capricious, not hesitating even to maltreat or imprison his nobles and provincial governors, with the result that there was always someone among them in rebellion against him. Bābur, the Mughal king of Kabul, had already raided India twice, but now Daulat Khān Lodī, governor of Lahore, who was

much too discontented with the Sultan, sent him an invitation to attack the Lodī ruler. Bābur marched into India in 1523 but had to go back owing to the pressure by Uzbeks on Balkh. In 1525 he returned, and the armies of Ibrāhīm and Bābur met at the famous battle of Panipat. Ibrāhīm was killed and Bābur occupied Agra and Delhi. Ibrāhīm's tomb lies at Panipat. The original tomb itself was perhaps a modest structure. All that one now sees there is a grave on a brick platform, obviously an almost recent construction

4. MONUMENTS OF THE PROVINCIAL KINGDOMS

The Sultans of Delhi ruled over the different parts of the country through their governors. The ambition of these governors or the weakness of the central authority led them, sooner or later, to throw off the central yoke and to become independent, not only politically, but also, to some extent, culturally. The provinces thus developed regional styles of architecture, which were conditioned by several factors, such as the extent of the influence of the central power, the personal taste or interest of the ruler, contact with foreign traditions, influence of earlier local traditions, presence of suitable craftsmen and availability of particular materials.

In the main, eight provincial styles, including those prevalent in what is now Pakistan, are generally recognized, although other variations, less significant, could also be pointed out. The main characteristics only of these styles and their products are described below under each provincial kingdom.

A. Panjab (*circa* 1150-1325)[1]

In Panjab two towns or erstwhile provincial headquarters came under the control of the Muslims, albeit they arrived there through different routes and in different periods. As a result of the Arab invasion early in the eighth century, a Muslim kingdom was established at Multan, while at a later date both Maḥmūd of Ghazni and Muḥammad of Ghūr secured Lahore as base for their inroads on India. The use of brick, coloured tilework and woodwork characterize the Panjab style. No monuments of this period have survived in Lahore, although it is noticed that some later woodwork in Lahore and other towns of Panjab retains certain features which were derived from Saljuqian ornamentation and characterized the Panjab style.

The position is different at Multan, where five tombs enshrining the remains of saints were built between the middle of the twelfth and the beginning of the fourteenth centuries. Among these the most impressive is the tomb of Shāh Rukn-i-'Ālam (built in *circa* 1320-25), with its octagonal ground plan, battered walls and tapering minarets and corner turrets (*guldastas*). Its picturesqueness is heightened by the use of coloured tiles, chiselled brickwork and bands of carved timber. It was built at the order of Ghiyāthu'd-Din Tughluq (1321-25), who was devoted to the saint: this explains the use of battered walls, a characteristic of Tughluq architecture. On the other hand, in the matter of octagonal plan, Multan architecture may have influenced the Delhi architecture, as the first octagonal tomb, that of

[1] A brief description of the style in Panjab (Pakistan) has been included, so as to give a comprehensive idea of the provincial styles, and also because it exerted some influence on the Delhi architecture.

Khān-i-Jahān Tilangānī, was erected much later in Delhi during the reign of Fīrūz Shāh Tughluq (above, p. 256).

B. BENGAL (*circa* 1200-1550)

In or about 1202 the Hindu king Lakshmaṇasena of Bengal was surprised and overrun at Nadia (Navadvīpa) by Bakhtyār Khaljī's son, Muḥammad Khaljī, who subsequently established a more or less independent administration there, although nominally under the Delhi Sultans. It was, however, during the rule of Muḥammad Tughluq that Bengal became really independent. In 1576, Dā'ūd Shāh, the last Afghan ruler of Bengal, was killed by the generals of Akbar and the province reverted to the central imperial control.

The Islamic monuments of Bengal are not much different from such buildings elsewhere on plan and in design, but the use of a different building-material and the execution of details inspired by local traditions have made them quite distinct. The socalled 'Bengal' roof with sloping cornices, which originated from bamboo-construction, was adopted by the Muslims, and later it spread widely even in other regions. Brick was the chief building material in the alluvial plains of Bengal from early times and remains so even now, the use of stone being limited largely to pillars, which were mainly obtained from the demolished Hindu temples. The pillars in Bengal, even when constructed with brick, are generally short and square, and the openings usually arcuate, for trabeate construction normally called for the use of stone. Stone carving in low relief is seen in some buidings. But it is the traditional carved brick which was pressed into service for decoration.

Only the patterns became geometrical, arabesque or floral, without any weakening in their richness and profusion. Glazed tiles in pleasing colours were also used for decoration.

The Islamic architecture of Bengal may be divided into three phases: (i) from *circa* 1200 to 1340, while the capital was at Lakhnautī (later called Gaur) and the kingdom still nominally under the Delhi Sultans; (ii) from *circa* 1340 to 1425, when the capital was at Pandua; and (iii) from 1425 to 1576 during which the capital was again shifted to Gaur.

Gaur and Pandua are separated by a distance of only 27 km. and lie in the present Malda District of West Bengal; their entire area is covered with the remains of citadels, palaces, gateways, mosques and tombs. Monuments of the first phase are no longer extant at Gaur. Some idea of their character may, however, be gleaned from contemporary remains at and near Tribeni on the Hooghly river, which was apparently occupied by the Muslims in the initial stages of their arrival in Bengal.

Here the mosque of Zafar Khān Ghāzī, an early adventurer, bears an inscription of 1298 but was entirely rebuilt in the sixteenth century. His tomb, however, shows that it was built largely with reassembled material from a Hindu temple, although pointed arches were incorporated in the design.

An early mosque in the neighbouring village of Pandua (different from the capital in Malda District), now extremely dilapidated, is multi-domed and rectangular on plan. It is built with brick, but the pillars are of stone obtained from a demolished temple. In the neighbourhood is a 36·5-m. high brick tower, built about 1340 in several storeys. Even with its crude proportions, it recalls the Qutb-Minār at Delhi.

There are extensive mounds of ruins at Pandua indicating a long occupation even before it was made capital in or about 1340 by 'Alāu'd-Dīn 'Alī Shāh, perhaps to bring himself within a striking distance of Sonargaon, where his rival Fakhru'd-Dīn Mubārak Shāh held control.

There is, however, only one monument here which illustrates the second phase in the development of the Islamic architecture in Bengal. It is the Ādina-Masjid, in fact, an elaborated version of the mosque at Pandua near Tribeni, just described. Begun in 1364 by Sikandar Shāh (1357-93), it is one of the largest mosques in India, with its outer dimensions measuring 154.5 m. by 87 m. Built on the usual rectangular plan, it has an impressive façade of arches on the interior extending to a depth of five bays on the west and three on the other sides; all its cubicles are surmounted by a total of three hundred and seventyeight small domes. Stones pilfered from demolished Hindu temples, possibly from as far as Lakhnautī, have been used in its pillars, carved *miḥrābs* and as veneer in the lower portion on the exterior and up to the cornice inside the prayer-chamber. In the prayer-chamber the trefoil or multi-foil arches of the *miḥrāb* and another adjacent niche, placed within a rectangular frame and carved with stylized geese and other motifs, are remarkably indigenous in feeling. Its arches, with the centre at the impost level and with the span in excess of the radius, lend a peculiar fascination to the aisles. Part of the northern half of the prayer-chamber is divided into two storeys, the upper storey known as the *Bādshāh-kā-Tākht* ('king's throne') being obviously intended for the king and royal ladies. Its spacious nave was roofed by a vault of pointed arch.

The third phase constitutes the real provincial style of Bengal, when the builders ceased to depend on the utilization of material stripped from Hindu temples and brought their structures into harmony with the local traditions and materials. The first great construction of this style is the mausoleum of Jalālu'd-Dīn Muḥammad Shāh (1414-31), called the Eklākhī tomb, at Pandua, while the other monuments of this phase are mostly concentrated at Gaur.

The Eklākhī tomb consists of an octagonal tomb-chamber, within a large square hall with octagonal corner-towers and curved cornices, the roof being surmounted by a central hemispherical dome. Its façade is divided in the middle by a string-course with panels above and below it giving it the semblance of two 'storeys'. Each side is pierced in the centre and fitted with a stone door-frame, bodily removed from a temple but provided with a pointed arch above the lintel in the Tughluq style. The whole surface of walls and towers is profusely decorated with carved brickwork.

At Gaur the earliest building representing the constructional and ornamental methods of this style, although of an entirely different character, is the Dākhil-Darwāza, built by Bārbak Shāh (1459-74) as a ceremonial gateway in front of the citadel. With a tall arched entrance between vertical pylons on either side and tapering towers on the corners, it is an imposing structure (pl. LXXIV).

The main features of construction in the Eklākhī tomb, however, set the pattern for several mosques at Gaur and elsewhere. These mosques with curved cornices and often decorated with glazed tilework comprise a rectangular prayer-chamber apportioned into several aisles and bays, divided by pillars of brick or stone, the latter mostly removed from

Hindu temples. Arched openings characterized their façade and also sometimes the sides. At the corners stand towers, usually octagonal. There are small domes over each bay or a bigger one in the centre. The façades are divided by one or two string-courses and series of decorative panels. The western wall in the interior bears several niches, the central one being larger and more plentifully decorated. The usual courtyard in front of the prayer-chamber has been dispensed with in several mosques. Such are the Tāntipāṛā (*circa* 1475), Chāmkāṭi or Chāmkān (*circa* 1475), Darasbāṛī (*circa* 1480), Loṭan (*circa* 1480), Gunmant (*circa* 1484), Chhoṭā-Sonā (*circa* 1510), Baṛā-Sonā (*circa* 1526) and Qadam-Rasūl (1530) mosques at Gaur. The Darasbāṛī-Masjid is particularly rich in terracotta ornamentation, including the rather unusual 'palm-and-parasite' motif, which is found also in Gujarat, although in a latticed screen (below, p. 277). The small rectangular tomb of Fateḥ Khān (died *circa* 1657) at Qadam-Rasūl is covered by a gabled and curved roof, the structure looking like a thatched hut.

The 26-m. high Fīrūz-Minār at Gaur, twelve-sided in the lower three storeys and round in the upper two, is decorated with both carved bricks and glazed tiles

C. Jaunpur (*circa* 1360-1480)

Malik Sarwar, originally a eunuch in Muḥammad Tughluq's household, held the title of Khwāja-i-Jahān ('Master of the World'), and, after Fīrūz Tughluq had declared Jaunpur a provincial capital, was appointed the governor of the province with the title of Maliku'sh-Sharq ('King of the East'). In 1394, he became independent and extended his

authority over Oudh, Tirhut and Bihar. He and his successors, known as Sharqī kings, ruled from Jaunpur for nearly a century.

After Malik Sarwar's death, his adopted son Qaranful ascended the throne under the name of Mubārak Shāh (1399-1402). His successor, Ibrāhīm Shāh (1402-36), was a great patron of learning and architecture, and utilized the talents of the poets, artists and craftsmen who had left Delhi after the devastation brought about by Tīmūr's raid. Jaunpur now came to be known as the 'Shīrāz of India'. Finally Husain Shāh, who came to the throne in 1458, was driven from Jaunpur by Buhlūl Lodī and the Sharqī dynasty thus came to an end. Later Sikandar Lodī annexed Jaunpur to the Delhi Sultanate. He spared the mosques, but other buildings at Jaunpur suffered total devastation at his hands.

Jaunpur was a prosperous Hindu town with several temples, which were all pulled down by the Muslims and the material utilized in mosques. Among the pre-Sharqī Muslim buildings at Jaunpur is a fort and a mosque, both now dilapidated. The mosques erected by the Sharqī rulers are built on the conventional plan, but they possess distinct characteristics in which tapering minarets, battered sides of the pro-pylons, stucco decoration, arch-and-beam openings and low four-centred 'Tudor' arches with decorative fringes are features influenced by the Tughluq style. The square pillars in the mosques are comparatively plain, and bracket and capitals only roughly carved. The Sharqī monuments are, however, more ornate than the Tughluq ones. Their carved stone ceilings, latticed screens, panels and arches with their tympana, all bear floral and geometrical designs of somewhat rough but effective workmanship. The one distinct feature of Jaunpur

style, however, is the pro-pylon, a tall screen with battered sides concealing the dome, and raised in front of a gateway or an opening of the prayer-chamber.

The Aṭāla-Masjid was the first building to be erected in Jaunpur style. Its foundations were laid in 1377 by Fīrūz Shāh Tughluq on the site of the Hindu temple, said to be of Aṭalā-devī, but the construction was taken up later by Ibrāhīm Shāh and completed in 1408. It has the usual quadrangular plan, with a square courtyard enclosed by the prayer-chamber on the west and cloisters on the other three sides. The cloisters are in five aisles and double-storeyed, two aisles on the lower storey with a pillared verandah opening on the outside and providing a series of cells for use by pilgrims or merchants. Beams and brackets support the openings in cloisters.

On each side the cloisters are interrupted by a gateway fronted by a pro-pylon. The pro-pylon in front of the nave in the prayer-chamber, 23-m. high and 17 m. wide at the base, is, however, the most graceful and imposing (pl. LXXV). Containing a tall recessed arch, 3.4 m. deep, flanked by two towers, with series of openings in the upper portion, it also provides the entrance to the nave through a central beam-and-bracket opening surmounted by an arch. The verticality of its towers on either side of the tall arch is broken by four main string-courses and sunk arches. Two other similar pro-pylons of smaller size are placed on either side of this main one.

The nave in the prayer-chamber is vertically divided into three portions, so that the sides are first converted into an octagon by means of squinches and then into a sixteen-sided base by brackets, in order to raise the shapely hemispherical dome. At

one end of the transepts, supported on pillars and screened by *jālīs*, is the enclosure reserved for ladies. At the rear, not merely the portion occupied by the main *miḥrāb* but also those by the other two *miḥrābs* facing the side pro-pylons, project outwards and are flanked by tapering minarets in the Tughluq fashion.

Two other mosques, built about 1430, generally on the same pattern as the Aṭāla-Masjid, are Khālis-Mukhlis-Masjid and Jhānjhrī-Masjid. The former is simple and devoid of much ornamentation; the latter, its central pro-pylon alone now surviving, shows that its screen (*jhānjhrī*), from which it derives its name, is highly ornamental. Another mosque, the Lāl-Darwāza-Masjid, was built about 1450 by Bībī Rājā and forms part of a palace-complex.

The Jāmi'-Masjid, which is the largest mosque at Jaunpur, was built about 1470 by Ḥusain Shāh (1458-79), the last Sharqī ruler. Its two distinct features, absent in other mosques preceding it, are that, like some of the Tughluq mosques in Delhi, it is built on a raised terrace; and its transepts on either side of the nave are covered by high vaulted roofs, a feature which is not found in any other similar building.

D. GUJARAT (1297-1572)

Gujarat was conquered by 'Alāu'd-Dīn Khaljī in 1297, and he appointed a governor there. Muḥammad II (1390-94), grandson of Fīrūz Shāh Tughluq, sent Zafar Khān as its governor, but he declared himself independent in 1408 and ascended the throne under the title of Sultan Muzaffar (1408-11). It was, however, during the rule of his grandson and successor Aḥmad Shāh (1411-42) that Gujarat

became independent in reality. Among the Sultans of Gujarat, the long reign of Maḥmūd Begaṛha (1458-1511) is regarded as most prosperous. His grandson Bahādur Shāh (1526-37) came on the throne about the same time when the Mughals captured the Delhi throne. Gujarat, however, remained independent till 1572, when it was annexed by Akbar.

The Gujarat style is the richest and perhaps the most prolific among the provincial styles. A rich local architectural tradition and the vanity and patronage of powerful Gujarat kings, which impelled them to raise buildings in rivalry with other kingdoms, including the Sultanate of Delhi, appear to be responsible for the production of so many important monuments in Gujarat.

The long span through which the Islamic architecture in Gujarat passed can be divided into three periods. In the first period (1297-1411), from the time Gujarat came under the control of 'Alāu'd-Dīn Khaljī till it became really independent, buildings in Gujarat were either converted from Hindu temples or built largely with their dismantled material. The Khaljī conceptions of symmetry and proportions, blended with the local leaning towards spaciousness, elegance and decorative designs, created a new idiom. But among the important monuments raised during this period at Patan, Broach, Cambay, Dholka, Mangrol and Petlad, few have survived. At Patan, where numerous temples were erected during the Solaṅkī rule, a temple was converted in about 1300 into Shaikh Farīd's mausoleum. Even in the Ādīna or Jāmi'-Masjid here, built by the Khaljī governor Ulugh Khān, now survived only by its foundations, pillars from Hindu temples were re-erected to the plan of a mosque.

In the Jāmi'-Masjid at Broach, built early in the fourteenth century, the open pillared prayer-chamber is divided into three compartments, each compartment containing apparently pillars from a single *maṇḍapa*. Its western wall contains niches provided with pointed arches and carved on the general pattern of the niches in Hindu temples, but with motifs characteristic of Islamic ornamentation.

Unlike the mosque at Broach, the prayer-hall in the Jāmi'-Masjid at Cambay, built in 1325, is not an open pillared hall, but one closed with walls and provided with arched openings, as in the Quwwatu'l-Islām mosque at Delhi (p. 247) or the Aṛhāi-Din-kā-Jhonpṛā at Ajmer (p. 249). The alternating narrow and wide courses in its construction, however, recall a Khaljī characteristic noticed at Delhi (p. 250). The pillars inside the central arch bear an engrailed arch, like a *toraṇa* in a temple, a device which became very popular later. The Hilāl Qāzī's mosque at Dholka is smaller but introduces for the first time a graceful minaret on either side of the central arch, a feature which later became characteristic of the Gujarat architecture. The Ṭānka-Masjid, again at Dholka, built in 1361, has an open pillared prayer-hall, and rich carvings on the pillars and ceilings. The Jāmi'-Masjid at Mangrol possesses three archways and balconied windows.

The second period (1411-58) in the development of Gujarat architecture commenced with the enthronement of Aḥmad Shāh (1411-41), who brought real independence to the province and founded the city of Ahmadabad, close to the old town of Asawal. It was now that a distinct Gujarat style took shape. The uncertainties of the earlier improvisation and experimentation disappeared; the buildings

were thoughtfully planned and executed to result in complete specimens of the style. The device of admitting light through a clerestory in the raised central portion of the roof, graceful minarets, delicate latticed screens, profuse carvings in windows supported on carved brackets and a balanced use of both arcuate and trabeate construction are some of the features characteristic of this phase.

The citadel raised by Aḥmad Shāh on the bank of the Sabarmati river is survived now only by a gateway, called the Bhadra gateway. Aḥmad Shāh's mosque inside the citadel, surmounted by two rows of five domes each and with a façade of five arches, contains at least some pillars reused from Hindu temples and follows the pattern of the Jāmi'-Masjid at Cambay. In Ḥaibat Khān's mosque, surmounted by three domes, the two turrets in front and the five bastions at the rear, all tapering, suggest Tughluq influence. The five-domed mosque of Sayyid 'Ālam, built in 1412, strikes, however, a new note with its prominent minarets, now survived by their bases, heavy projecting cornices, pillared openings on the sides, rich decorative details and the addition of a gallery or triforium on the second storey around the nave. It is, however, in the Jāmi'-Masjid, built in 1423, that these and other characteristic features came into full play and created a monument which is grand in conception and finished in details.

The prayer-hall of this mosque, 64 m. by 29 m., consisting of about three hundred pillars, is divided into fifteen large squares, three along the depth and five along the width, each square being surmounted by a large dome, while smaller domes cover the smaller squares between the larger ones. The sky-line of the roof is broken by raising the portion over the three central arches into two storeys in the

first bay, and the portion around the central dome above the nave into three storeys. The single-storeyed height at the northern extremity adjoining the rear wall is divided into two storeys, the upper one consisting of a latticed gallery for the ladies.

Aḥmad Shāh desired to integrate the Jāmi'-Masjid and his citadel into a unified plan. Accordingly he built a three-arched ceremonial gateway, called the Tīn-Darwāza, to the east of the Jāmi'-Masjid on the road from the citadel. To its south lie Aḥmad Shāh's tomb and a latticed enclosure containing the tombs of the queens, called Rānī-kā-Ḥazīra.

Muḥammad Shāh (1442-51) built in 1446 the mausoleum and mosque of the famous saint, Shaikh Aḥmad Khaṭṭū, at Sarkhej, 10 km. south-west of Ahmadabad. This grouping of a mosque and mausoleum, called Rauza, became very popular in Gujarat. Later Sarkhej became an important place of retreat; and several mosques, tombs, palaces, gateways and gardens were laid out here around a vast reservoir.

The next ruler, Qutbu'd-Dīn Aḥmad Shāh (1451-58), built a mosque and his tomb. The former, consisting of a pillared rectangular hall faced with a wall containing five arches and surmounted by five domes, is a simple structure, but nonetheless effective with a restrained use of latticed windows and other ornamentation. To his reign also belong two other buildings, constructed with brick and in a style which has little relationship with the architecture of Gujarat. These arose perhaps as a result of commercial contact between southern Persia and the west Indian coast. Of these the mosque of 'Alīf Khān at Dholka was built in 1453 and is now in ruins. Its interior is divided into three squares, each surmounted by a dome, intercommunication being provided through arched openings, and there being

massive rectangular turrets on either side of its arched façade. The tomb of Daryā Khān, built about the same time at Ahmadabad, consists of a square chamber in the centre with an arcade of five bays around it, each bay roofed by a dome, the central one being the largest.

Gujarat architecture reached its zenith in the third and final phase (1458-1572), which began with the rule of Maḥmūd Begaṛha (1458-1511). In this period a happy and effective fusion was achieved between the local traditions and the methods and principles special to the Islamic architecture. The high standard of architecture now reached was due in no small measure to the personal zeal and interest of Maḥmūd Begaṛha himself, and in fact, most of the major monuments were erected during his rule. He founded the cities of Mustafābād at Junagadh, Maḥmūdābād, 27 km. from Ahmadabad and Muḥammadābād at Champaner, all of which can be proud of some important Islamic monuments. The number of buildings erected during this period is very large, and only some of them are noticed here.

Notwithstanding the king's interest in his recently founded cities, Ahmadabad continued to be enriched by new buildings. The mosque of Muḥāfiz Khān, who was appointed the magistrate of Ahmadabad when Maḥmūd Begaṛha took his residence at Mustafābād, was built in1492. It is small in size and conventional in pattern but contains all those features and details which characterize the larger mosques, and is virtually a gem of architecture. The mosque of Rānī Sīprī built in 1514, is also small, but beautiful in decorative workmanship. Its tall slender turrets, solid and without stairways, placed at either end of its pillared façade, mark a new stage in the development of minarets. The walls of Sīdī Sa'īd's mosque,

built in 1572, consist substantially of perforated screens, but it has become world-famous on account of its screens covering the tympana (pl. LXXVII A). These screens, some of them representing the 'palm-and-parasite' motif, which occurs also in the Darasbāṛī-Masjid in Bengal (p. 268), has the delicate quality of filigree-work.

Certain monuments were also erected in the suburbs of Ahmadabad. At Uthmanpur, on the other side of the river opposite Ahmadabad, was built in about 1460 the Rauza of Sayyid Uthmān, in which the hall of the mosque is roofed by low domes, and at either end of the pillared façade stands a six-storeyed minaret. The mosques of Miyān Khān Chishtī and Bībī Achūt Kūkī, at Hajipur and Multanpur, built in 1465 and 1472 respectively, are divided into three compartments and screened with walls pierced by arches, with a minaret flanking the central archway on both sides. At Rasulabad, popularly known as Shāh-i-'Ālam on account of his tomb here, 2·5 km. south of Ahmadabad, several buildings came up between 1475 and 1570. So also at Batwa, about 10 km. south of Ahmadabad, where the tomb of Qutb-i-'Ālam, built about 1480 over an earlier grave, is important. It is a double-storeyed structure consisting of pillars and arches, no trabeation occuring in the entire structure. A similar construction is the tomb of Mubārak Sayyid, built in 1484, near Maḥmūdābād, which was founded by Maḥmūd Begaṛha in 1479. At Sarkhej, Muḥammad Shāh (1442-51) had built a tomb, as mentioned earlier (p. 275). Maḥmūd Begaṛha added there, among other buildings, a double-storeyed columned palace, with projecting bays and pavilions, and his own tomb.

At Champaner, in 1485, he had founded his new capital of Muḥammadābād, consisting of a

citadel and outer city-walls. Among several monuments existing there, two are important. The Jāmi'-Masjid here was built in 1523 on the same pattern as the Jāmi'-Masjid of Ahmadabad. The much smaller Nagīna-Masjid follows the plan and details of the larger mosques, but impresses more as an ornamental piece.

The traditional fondness for decoration among the craftsmen of Gujarat resulted in even purely utilitarian constructions being treated with ornamentation. Such are the sluice-openings, as for example, at the Kankaria reservoir at Ahmadabad and at the tank at Sarkhej and *bāolīs* or stepped wells, as Bāī Harīr's *bāolī* at Ahmadabad.

E. Malwa (1401-1561)

Malwa was invaded by Iltutmish early in the thirteenth century, but it came under the control of the Delhi Sultanate in about 1310 during 'Alāu'd-Dīn Khaljī's rule (1296-1316). In 1401 Dilāwar Khān Ghūrī, a governor, who claimed to be a descendant of Muhammad Ghūrī, proclaimed himself independent. This independent kingdom was annexed by Gujarat in 1531, and later conquered by Humāyūn. When Humāyūn regained his throne after his return from exile, Shujā'at Khān, who had been appointed governor by Sher Shāh Sūri, refused to acknowledge his authority. In 1554 Shujā'at Khān died and his son, Bāz Bahādur, whose romantic tale of love with Rānī Rūpamatī is well-known, ascended the throne. He was driven away in 1561 by Adham Khān, Akbar's general, and Malwa thus came under the authority of the Mughals.

The local Hindu architectural traditions did not much influence the Islamic constructions in Malwa;

instead the province depended on Delhi, from where many craftsmen were uprooted in consequence of the devastation wrought by Tīmūr and had taken employment in different provinces. It is no wonder, therefore, that the Malwa style is essentially arcuate. The pointed arch with 'spear-head' fringe, battered wall and arch-and-lintel door in this style are derived from the Khaljī and Tughluq constructions, while the pyramidal dome follows the Lodī contours. The style possesses, however, some features of its own, such as large spaces, high plinths approached by impressive flights of stairs, skilled use of arch-and-beam, carved brackets supporting the windows, perforated screens and the decorative effect achieved by the use of stones of different colours or of encaustic tiles.

This style also passed through three phases, as we find with some other styles, although its third phase is of a different nature. In the earliest phase use was made of pillars obtained from demolished Hindu temples, but they were tied to each other by arches on the principles of Islamic construction.

Dhar, capital of Malwa under the Paramāra kings, retained that position under the Muslim governors and kings till 1405, when Hūshang Shāh (1405-35) transferred the capital to Mandu. There are two mosques at Dhar which illustrate the first phase in the Malwa style. The mosque of Kamāl Maulā (*circa* 1400), also known as Bhojaśālā, consists of a courtyard with pillared corridors on three sides and a prayer-chamber along the western wall. The pillars are taken from what was the Bhojaśālā or king Bhoja's hall, which was apparently not merely a temple but also a college, since some of the inscribed slabs found from the ruins bear literary texts of Bhoja. The Lāṭ-Masjid, built in 1405 by Dilāwar

Khān, is similar and contains fragments of an iron pillar (Hindi *lāṭ*), from which it derives its name.

Mandu lies 35 km. south-east of Dhar on the spur of a Vindhyan hill, some 610 m. above the sea, surrounded by a gorge. It was, therefore, ideally situated from considerations of security, which led Hūshang Shāh to shift the capital here. Within the natural fortress, enclosed by battlemented walls running over a circumference of 40 km., were raised several mosques, tombs, palaces, tanks and pavilions, depending on the contours of the terrain. Two of the mosques here belong to the first phase and are built from the remains of Hindu temples. These are Dilāwar Khān's mosque, built in about 1405, and Malik Mughith's mosque, built in 1452. In these mosques the spaces between pillars are spanned by arches, even though they are ornamental rather than functional.

Among the entrances to the fort, two are well-known, the Delhi Gate on the north and the Tārāpur Gate on the south-west The other monuments lie in several clusters, three of them important. In the first cluster are the Jāmi'-Masjid, Ashrafī-Maḥal and Hūshang Shāh's tomb; in the second, Hindolā-Mahal and Jahāz-Maḥal, and in the third, Bāz Bahādur's palace and Rānī Rūpamatī's pavilion.

The Jāmi'-Masjid was begun by Hūshang Shāh but completed in about 1440 by Maḥmūd I (1436-69) of Khaljī extraction, who had killed Hūshang Shāh's son and enthroned himself. The square courtyard of the mosque has an open façade of eleven arches on each side, with a depth of three aisles on the north and south, two on the east and five in the prayer-chamber. It is built on a raised plinth approached by a long flight of steps on the east. The square gateway, projecting from the enclosure

and with its interior decorated with enamelled tiles, is surmounted by a large dome, while there are three similar domes over the prayer-hall and a smaller one on each square bay in the aisles.

The tomb of Hūshang Shāh, built of marble, is contiguous with the western wall of the Jāmi'-Masjid, and, like it, was commenced by Hūshang Shāh himself and completed in about 1440 by Maḥmūd I. Entered through a domed porch, the square tomb lies in the centre of a quadrangle and is roofed by a large dome, with smaller cupolas at the corners.

Opposite the Jāmi'-Masjid on the eastern side of the main north-south road is the Ashrafī-Maḥal, which was built by Maḥmūd I, perhaps early during his reign. Originally it consisted of a large square courtyard enclosed by a series of cells on the outside fronted by two arched arcades. The central portion of the western side projected further with series of cells on its three sides and a porch in front, approached by a long flight of steps. The courtyard was later filled, and on it was raised what has been surmised to be the tomb of Maḥmūd I but exists now only in ruins . The corners of the quadrangle of the Ashrafī-Maḥal were provided with towers, the one at the north-western corner being the largest and highest, and now survived only by its lower portion. It is believed to be identical with the *Haft-Manzil* of the contemporary historians and was raised to signify Maḥmūd's victory over Rāṇā Kumbha of Chittor, who had himself raised his famous tower of victory at Chittor in commemoration of his earlier victory over Maḥmūd I (p. 172).

Almost immediately inside the Delhi Gate there is a large group of buildings, two of which deserve mention. The Jahāz-Maḥal (pl. LXXVI), an oblong structure divided into three halls, with an ornamental

cistern in the northern courtyard, was built by Maḥmūd I as a royal palace. It lies between two tanks, which brimmed over with their waters during the monsoons, and appear to have given it its name, meaning the 'ship-palace'. With a long flight of steps in front leading to its spacious terrace, provided with domed pavilions, and other pavilions projecting at the rear on the bank of the tank, it must have looked grand in its heyday. Jahāngīr relates that Nūrjahān, his queen, was extremely fond of this palace, and when they stayed here they were both entertained often to long-lasting festivities.

The Hinḍolā-Maḥal, possibly raised during the reign of Ghiyāthu'd-Dīn (1469-1500), is T-shaped, with the vertical stem of the letter consisting of a long hall with an opening at the end and tall arches on the sides, their piers buttressed with slopes. The illusion that these buttresses create has given it its name meaning the 'swinging-palace'. The horizontal stem of the letter was added later and is in the shape of a double-storeyed structure, with a cross-shaped hall on the ground floor.

The final phase of the Malwa buildings does not represent any advance in architecture. These buildings, consisting of palaces, pavilions, *ḥammāms*, etc., were raised for pleasure, which was the royal fashion of the day. The palace of Bāz Bahādur, approached by a flight of steps, with its courtyards, halls, octagonal pavilions and *bārādarīs* on the terrace, and Rānī Rūpamatī's pavilions consisting of a double-storeyed structure with sloping walls and containing a long hall with rooms at the two ends, to which domed pavilions on the terrace were added later, belong to this phase. Rānī Rūpamatī is said to have used these pavilions daily for having a glimpse

of the sacred Narmada from here. Among other monuments representative of this phase are the Nīlakaṇṭha palace, Lāl-Maḥal and Chishtī Khān's palace.

Chanderi was a province of the kingdom of Malwa, and several buildings in the Malwa style were raised there. Kushk-Maḥal, originally seven-storeyed, but now surviving in four storeys, was built here in about 1445 by Maḥmūd I. The Jāmi'-Masjid is built on the same plan as the one at Mandu, but contains convoluted brackets supporting the eaves in Gujarat fashion. The Shāhzādī-kā-Rauza has plain but bold squinch-arches, with lotus medallions in its tympana and spandrels. The 15-m. high Bādal-Maḥal gateway, with tapering turrets spanned by a screen of two arches, one above the other, is original but lacks boldness or grace.

F. The Deccan (1325-1687)

The whims of Muḥmmad Tughluq (1325-51) caused virtually an unbroken series of rebellions in the different provinces of the Delhi Sultanate. In the Deccan, which had been invaded by 'Alāu'd-Dīn Khaljī and brought under the authority of the Delhi Sultans, Ḥasan, a general on whom Muḥammad had bestowed the title of Zafar Khān, declared himself independent in 1347 at Daulatabad. He enthroned himself under the full title of Abu'l-Muzaffar-'Alāu'd-Dīn Bahman Shāh (1347-58) and founded thus the Bahmanī dynasty.

He established his capital at Gulbarga, but one of his successors, Aḥmad Shāh (1422-35), shifted it to Bidar in 1425. After the reign of Maḥmūd Shāh (1482-1518). the provinces of the Bahmanī kingdom broke away one after another, and five independent

kingdoms came into being with capitals at Bidar, Berar, Ahmadnagar, Bijapur and Golkonda. They retained their independent status till almost the end of the seventeenth century, when ultimately they were annexed by Aurangzeb.

Bahman Shāh himself was perhaps of Persian extraction. Besides, the Bahmanī rulers, who were incessantly at war with the Hindu kingdoms of the south and even attempted to exterminate the Hindu population or to convert it to Islam, encouraged Persians, Turks, Arabs and Mughals to marry Hindu women and settle in their territory. This was also the time when adventurers, literary men, artists and craftsmen from west Asian countries were freely coming either to the imperial court at Delhi or to the powerful provincial court of the Deccan. These conditions naturally affected the Deccan style of architecture, which owed little to the local Hindu traditions, at least in its early stages. The two major streams which fed it were the imperial one from Delhi and the Persian one from abroad. The latter took stronger roots gradually, so that some of the monuments are so avowedly Persian in character that they appear to have little connexion with the main course of the Indo-Islamic architecture.

The earliest Islamic buildings in the Deccan that appeared during the rule of the provincial governors were converted, as might be expected, from Hindu temples. Such, for instance, are the two mosques at Daulatabad and Bodhan, near Hyderabad, the latter consisting merely of some alterations and additions to a Jaina temple. The real Deccan style, which came into existence from the time when the province became independent in 1347, may be divided into three phases: (i) 1347-1425, when Gulbarga was the capital, (ii) 1425-1518, when

Bidar served as the capital, and (iii) 1518-1687, when the original kingdom broke up into five independent kingdoms.

A series of forts were the first monuments to be erected by the Bahmanis. Among them the fort at Gulbarga, perched on a hill and consisting of double walls, battlemented with heavy stones, with an encircling moat cut into the rock, is impressive and representative of this class. It is, however, the Jāmi'-Masjid at Gulbarga, built in 1367, which exhibits features of the Decean style and is, at the same time unique. Entered through a gate on the north, it has corridors on its three sides and a prayer-hall on the west, which is surmounted in the centre by a tall dome resting on a raised clerestory. Its unique characteristic is its pillared but roofed courtyard, a feature which finds no parallel, except that the courtyards of two mosques built in Delhi during the reign of Fīrūz Shāh Tughluq (above, p. 259) are partially covered. The arches of its cloisters, with low piers and a wide span, invest its arcades with a sombre but arresting look (pl. LXXVII B). The mosque was built under the direction of a Persian architect, which accounts for some of its features.

Among the other monuments at Gulbarga are seven royal tombs, divided into two groups. The three earlier tombs, massive structures, square on plan, with their battered walls, flat, wide domes supported on squinches, battlemented parapets and fluted corner-turrets have all the characteristics of Tughluq architecture. The tomb of 'Alāu'd-Dīn Bahman Shāh, the founder of the dynasty is, small but is decorated with tiles of deep blue colour. The dome of the tomb of Muḥammad Shāh II (1378-97) rises from a raised base, as in the Jāmī'-Masjid.

The other group consisting of four tombs is called the Haft-Gumbad ('Seven Domes'), as three of its tombs have two domes each and make up a total of seven domes. The earliest in this group, that of Mujāhid (1375-78), is larger than the tombs of the previous group but is built in the Tughluq style like them. The remaining three tombs, share the same Tughluq features, but consist of two adjacent chambers, one for the grave of the king and the other for those of his family. Among these the tomb of Tāju'd-Dīn Fīrūz (1397-1422), with its fluted domes, is the largest. A semblance of two 'storeys' is effected both on its exterior and the interior, through panels of recessed arches in two rows.

In 1425, Aḥmad Shāh Walī (1422-36), who remained ill at Gulbarga and considered it even unlucky, transferred the capital to Bidar, 96 km. north-east. The Bahmanī court now included several officers of Persian lineage, with the result that the customs, art and architecture in the Deccan came under the Persian influence. The fort of Bidar is larger than that of Gulbarga and is generally on the same pattern, but the remains of several palaces inside it, such as Rangīn-Maḥal ('Painted Palace') Takht-Maḥal ('Throne-room'), Dīwān-i-'Ām ('Hall of Public Audience') and Zanāna-Maḥal ('Palace for Ladies'), with gardens, waterways and *ḥammāms* are evidence of a royal life patterned on the courts of west Asian countries. These palaces were tastefully decorated with coloured tiles or mural paintings.

The Jāmi'-Masjid and the Sola-Khamba, the latter too a mosque, followed the plan and structural features of the mosque at Gulbarga, without however, their courtyards being roofed. Khwāja Maḥmūd Gāwān, a scholarly Persian nobleman, who had been appointed as minister by Humāyūn, nicknamed

Zālim or 'Cruel' (1457-61), but continued also during the reigns of his two successors, built in 1422 a *madrasa* or college, now largely in ruins. It is one of those buildings which are almost entirely Persian in details and consists of a large rectangular courtyard giving access to halls and rooms on the sides, with an entrance on the east flanked at the corners by four-storeyed *minārs*. From the middle of the other three sides project semi-octagonal towers roofed by tall bulbous domes. In the walls of this building sheets of lead were used to serve the purpose of the modern damp-proof course. Glazed tiles with floral, arabesque or inscriptional designs were used so thickly on its surface that the construction was subordinated to decoration. Within this spacious building appear to have been accommodated a mosque, lecture-halls, living quarters and the famous library of Maḥmūd Gāwān.

It is, however, the twelve royal tombs at Bidar, which help us to view the development of the Deccan architecture as a growing movement. They are similar to the tombs of the Haft-Gumbad group at Gulbarga, but there exists no double-chambered tomb here. Their domes are, however, stilted, with an inward return of the curve, putting them in the category of the so-called 'Tartar' dome. They all bear beautiful encaustic tiles, particularly the tomb of 'Alāu'd-Dīn Aḥmad Bahmani (1436-58).

During this period but before the construction of the *madrasa* of Maḥmūd Gāwān, a 30-m. high, four-storeyed *minār*, called the Chānd-Minār was built at Daulatabad in 1435.

After Maḥmūd Shāh (1482-1518), the Bahmanī kingdom broke up to be succeeded by independent kingdoms, five in number, in different parts. Qāsim Barīd, a Turkī minister, was virtually the ruler from

1487 during Maḥmūd Shāh's reign. He was succeeded by his son, Amīr Barīd. After Maḥmūd Shāh's death, other Bahmanis were allowed by Amīr Barīd to rule in name, till 1527, when he declared himself independent, and thus the regular rule of the Barīd Shāhī dynasty started at Bidar. The four other kingdoms were Berar, ruled by the 'Imād Shāhīs, Ahmadnagar, ruled by the Nizām Shāhīs, Bijapur, ruled by the 'Ādil Shāhīs, and Golkonda, ruled by the Qutb Shāhīs.

The rulers of these dynasties raised numerous buildings within their realms, which represent the third and the final phase of the Deccan style. The 'Imād Shāhīs of Berar and the Nizām Shāhīs of Ahmadnagar are not known for any remarkable architectural achievement, although the former founded the town and fort of Ahmadnagar where several monuments were erected. The Barīd Shāhīs continued the traditions of Bidar and built several tombs, among which the tomb of 'Alī Barīd (1542-79), the third of the dynasty, is not merely different from others, being open on all sides through its archways, but also the finest. It is, however, the dynasties ruling at Bijapur and Golkonda which were the cultural inheritors of the Bahmanī dynasty and developed their own distinct styles of architecture.

The province of Bijapur became almost independent in 1490 under Yūsuf 'Ādil Shāh (1490-1510), a slave purchased by Maḥmūd Gāwān. He was perhaps of Turkish origin, as suggested by the symbol of crescent on the finials of the domes of the larger monuments at Bijapur. Among the nine rulers of 'Ādil Shāhī dynasty, four were particularly interested in architecture. These are the founder Yūsuf himself, 'Alī Shāh I (1558-80), Ibrāhīm 'Ādil Shāh II (1580-1626) and Muḥammad Shāh (1626-56).

In Bijapur architecture the dome takes a bulbous form, with its drum concealed behind a row of petals and the arch loses its ogee character and becomes pointed and four-centred with low piers. Slender minarets or finials, *chhajjas*, voluted brackets, medallions in the spandrels and foliated finials above the arch distinguish its decorative devices. Surface-ornamentation is executed both in stone and stucco with such motifs as rosette, hanging lamp, arabesque patterns and interlacing inscriptions.

The city of Bijapur contains a citadel and fortress, but its architecture is dominated by a large number of mosques, tombs and *maḥals* (palaces). The Jāmi'-Masjid, built during the reign of 'Alī 'Ādil Shāh I (1558-80) was the first among the important monuments to be erected at Bijapur, although it remained incomplete and a gateway was provided to it by Aurangzeb. Its bare exterior is broken by two arcades, the lower one of recessed arches and the upper one of arched windows from its corridors. The large central hemispherical dome over its prayer-chamber, with petals around its drum, is crowned by a crescent and is enclosed by a square fenestration with finials at the corners. Its *mihrāb* was embellished later with a rich design in brilliant colours.

The Gagan-Maḥal ('sky-palace'), now even without its roof, is a double-storeyed rectangular hall, which was perhaps built about 1560 during the reign of 'Alī 'Ādil Shāh I. It is a civic building, the upper storey of which was apparently used for private apartments and the lower one as the king's audience-hall. What makes it worthy of notice is its façade, which is pierced by an arch with a span of over 18 m., another narrow arch flanking it on either side.

The Ibrāhīm-Rauza, built by Ibrāhīm 'Ādil Shāh II (1580-1627), consists of his tomb and mosque

within a square compound, both rising face to face from a common raised terrace, with a tank and fountain between them. The mosque has a rectangular prayer-chamber, with a façade of five arches, shaded by the *chhajja* and a slender minaret at each corner. Enclosed within a square fenestration rises the bulbous dome with a row of tall petals at its base. The square tomb with double aisles around it, the inner one pillared, has similar features but is finer in proportions. Two narrow arches, next to the ones at each end, break up its facade. On the interior, each wall has three arches, all panelled and embellished with floral, arabesque or inscriptional traceries. The tomb-chamber has a low curved ceiling made of joggled masonry, with empty space between it and the dome.

The Mihtar-Maḥal, which, in fact, is not a *maḥal* or palace, but the gateway of a mosque, is believed to have been built in about 1620, also during the reign of Ibrāhīm 'Ādil Shāh II. With slender minarets at its two corners, the façade of this two-storeyed structure is most remarkable. It is comparatively plain on the ground storey, but on the second storey its beautiful balcony with three arches in front and one each at its sides, supported on exquisitely carved brackets, and with long brackets tied to the narrow piers of the arches to support the *chhajja*, constitutes its main attraction.

By far the *magnum opus* of Bijapur architecture is the mausoleum of Muḥammad 'Ādil Shāh (1627-57), popularly known as Gol-Gumbad or 'Round Dome' (pl. LXXVIII), which is only a part of a larger complex, the other buildings in the scheme being a mosque, gateway called *Naqqār-Khāna* ('Drum-house') and a *dharma-śālā* or rest-house, all confined within an enclosure. The Gol-Gumbad is the largest

domed cubicle in the world, covering a total interior surface of over 1600 sq. m. Architecturally it is a simple construction, its underground vaults consisting of a square grave-chamber enclosed within two aisles, and a large single square chamber overground. The large hemispherical dome surmounting it and the seven-storeyed octagonal towers on its corners, lend it its unique appearance. Each of its walls on the outside is divided into three recessed arches, the central one panelled, with a running bracket-supported *chhajja* at the cornice. A 3.4-m. wide gallery rests on its interior at the level of the drum. It is known as the Whispering Gallery, from the fact that even a whisper here reverberates through an echo under the dome. While the smaller domes on its corner-towers are of bulbous variety, the large dome is hemispherical but is covered with a row of petals at the base. The 3-m. thick brick core of the dome is a corbelled construction bound by a tenacious mortar, with iron clamps keeping the veneer stones in position.

Warangal, which was earlier ruled by the Hindu kings of Kākatīya dynasty, was one of the provinces of Bahmanī kingdom. Qulī Qutb Shāh, a Turkī officer, who was appointed its governor by Maḥmūd Gāwān, withdrew himself after the latter's execution, but continued to recognize the Bahmanī suzerainty in name till 1518, when he declared himself independent and shortly thereafter transferred the capital to Golkonda. Later, in 1589, the capital was transferred to Bhagnagar, which was eventually named Hyderabad.

The Qutb Shāhī or Golkonda style has much in common with the Bijapur one, such as thin minarets with balconies, windows resting on brackets, lofty pointed arches and bulbous domes with elongated

necks, their base concealed behind a row of petals. Likewise its ornamentation is characterized by ornamental façades, with plasterwork and glazed tiles. The net effect is, however, somewhat different, on account of a florid look lent by a large number of turrets and cupolas and excessive ornamentation, some of which betrays Hindu influence in motifs.

The fort at Golkonda follows the same pattern as the ones at Gulbarga and Bidar, but the buildings inside it are now largely in ruins. The royal tombs, however, still survive and are, in fact, representative of the style. They are generally similar to the ones at Bidar. Square or octagonal on plan, some of these tombs are double-storeyed, the tomb-chamber having a low ceiling separating it from the ceiling of the dome. The tomb of Muhammad Qulī Qutb Shāh (1580-1612) is built on a double terrace and has three overhanging galleries; that of 'Abdu'llāh Qutb Shāh (1626-72) is large and double-storeyed containing several finials.

The Qutb Shāhīs built several mosques at Hyderabad. The Jāmi'-Masjid, built in 1577, is entered through a lintelled opening and has a double prayer-hall with its arches supported on heavy piers. The Tolī-Masjid (1671) has also a double prayer-hall, slender minarets and several cupolas, but is distinguished more by its rich surface decoration. The most remarkable of the monuments in Hyderabad, however, is the famous Chār-Minār ('Four Minārs'). It is a gateway, with a central square structure, open on each side through a lofty arch. There are four three-storeyed *minārs* on the corners, and a double screen of arched openings on the roof. The arcaded galleries, recessed and open arches flanking the openings and the bulbous cupolas provide the decoration which links it with the Golkonda architecture.

G. KHANDESH (1388-1601)

Malik Aḥmad, governor of the Tapti valley, who had been fighting against the Bahmanīs in local wars, declared himself independent and founded the small principality of Khandesh in 1388, after the death of Fīrūz Shāh Tughluq. He was known both as Malik Raja and Raja Aḥmad, although his successors preferred the title of *Khān*, from which the kingdom derived its name of Khandesh or 'the country of the *Khāns*'. The dynasty, however, is known as Fārūqī from the title of the second Caliph, from whom Malik Aḥmad claimed descent. Khandesh came for some time under the control of the kingdom of Gujarat, but was finally annexed by Akbar in 1601.

The Fārūqī kings ruled originally from Thalner and later from Burhanpur. Sandwiched as Khandesh is between the Deccan on the one hand and Gujarat and Malwa on the other, its architecture was influenced by the styles prevalent in the neighbouring provinces, both in the matter of construction and ornamentation. These combined influences derived from more than one quarter invested the architecture of Khandesh with a character of its own to entitle it to a separate, if not entirely an independent, entity and treatment.

At Thalner there are several tombs, designed more or less on Hūshang Shāh's tomb at Mandu. The inscribed tomb of Mīrān Mubārak (1441-57), also known as Mubārak Khān, which may be regarded as representative of the style, has general resemblance to Hūshang Shāh's tomb, but there is a wider spacing between doors and windows. Its parapets above the *chhajjas* are emphasized, and its stilted dome rises from an octagonal base. The cupolas

on the corners of the central raised portion are absent in some of the tombs. There exists also an octagonal tomb with ornamental fringe under its arch and profuse sculptured ornamentation on its façades.

The city of Burhanpur was founded in 1400, when the fort, called Bādshāhī Qal'a, was built on the Tapti. The Jāmi'-Masjid at Burhanpur, built in 1588 by 'Ādil Shāh IV (1577-97), also known as Raja 'Alī Khān, is conventional in pattern, but the façade of its prayer-hall with fifteen arches is flanked by a tall *minār* on either side in the Gujarat fashion. The Bībī-kī-Masjid, perhaps built earlier, has more originality and vitality. The façade of its prayer-hall is screened, except for the arches; and the central archway is flanked by three-storeyed *minārs*, which are square on plan but become first octagonal, then sixteensided, and lastly circular. Its striking feature is, however, provided by the oriel windows in its top storey. It is richly decorated with carvings and mouldings in the Gujarat style, although their workmanship is much poorer.

The tomb of Shāh Nawāz Khān, son of 'Abdu'r-Raḥīm Khān-i-Khānān, who held the post of governor, was built in the seventeenth century. It combines features borrowed from several styles: the double-storey from Gujarat, the pinnacles from the Tughluqs and the dome from the Lodīs.

H. Kashmir (1346-1589)

Early in the fourteenth century Shāh Mīrzā, an adventurer from Swāt, entered the service of Siṁhadeva, the Hindu king of Kashmir, who was killed and succeeded by a Tibetan. At the latter's death Udyanadeva became king, with Shāh Mīrzā

still continuing as the minister. After Udyanadeva's death in 1346, Shāh Mīrzā married the widowed queen and usurped the throne. His successors ruled till 1561 except for a short interval. Among them Sikandar (1393-1416) was a religious bigot and earned the title of *Butshikan* ('Idol-breaker'), while another successor, Sultān Zainu'l-'Ābidīn (1420-67) is known for his liberality towards the Hindus. Mīrzā Ḥaidar, a relative of Humāyūn, captured Kashmir and ruled it as a Mughal governor from 1540 to 1551, after which Kashmir became independent once again, till in 1589, it was finally annexed to the Mughal empire by Akbar.

Stone had been used in Kashmir by the Buddhists and Hindus in their shrines, but wood was most certainly the chief material employed in their civic buildings. These, however, have not survived owing to the perishable nature of the material. Initially the Muslims raised their buildings in brick on the stone foundations of demolished temples or constructed them with timber, but later stone was rehabilitated by the Mughals.

Judging from later buildings the woodwork was constructed with logs laid crosswise, so that on a corner a log appeared as a 'header' on one wall and as a 'stretcher' on the other. In bridges, the piers which rested on rock or masonry were widened gradually in upper courses on the principles of corbelling. Where necessary, wooden pieces were joined with wooden pins or dovetailed into each other. Courses of brick or stone were usually secured between transverse or horizontal wooden members. The wooden construction on the whole, however, remained simple, without mechanical devices or expedients.

Mosques or tombs constitute the two typical buildings in Kashmir architecture, the latter known

locally as *Ziārat*. Sultan Zainu'l-'Ābidīn raised his mother's tomb in brick in Srinagar on the stone foundations of a temple, square on plan but with offsets at the corners. The walls were, however, provided with recessed pointed arches, and the hall roofed with domes. Encaustic tiles were set on the walls for decoration.

The Rauza of Madanī is another monument which was built in 1444 on the foundations of a temple. In fact, even the Hindu carved pillars are used here both in the mosque and the tomb. The chief attraction of this monument, however, is its Mughal tilework of blue, red and yellow colours, which includes the curious representation of a half-human and half-animal being.

The tombs of timber, square on plan, have a cubical chamber surmounted by a pyramidal roof, over which rests an angular pinnacle or spire. The mosques are either square buildings like the tombs or four such squares are placed one each in the centre of the columned sides of an enclosure.

The mosque of Shāh Hamadān on the bank of the river Jhelum is built on the foundations of a temple, but its double-storeyed superstructure with projecting covered balconies is in wood. On the ground floor there is a rectangular hall, the remaining portion of the square being utilized for small chambers on the north and south. Birchbark in several layers is nailed on its roof, which is turfed and planted with flowers, the whole creating a very picturesque effect when the flowers are in bloom. The upper storey of the structure is plain but the pillars, capitals, prayer-niche and wall panels of the lower storey are carved, and the ceiling painted.

The Jāmi'-Masjid at Srinagar was commenced in about 1394 by Sikandar, but completed by Zainu'l-

'Ābidīn. It was burnt and rebuilt several times, the last main restoration having been carried out by Aurangzeb (1658-1707), perhaps without interfering much with its original plan and design. It is built with brick, with a substantial use of wood, and consists of a square courtyard surrounded by arched cloisters. In the middle of each side is a square structure like that of a tomb, serving as the nave on the western side and as a gateway on the others, the principal entrance being on the south.

Later the Mughals made use of stone in Kashmir and beautified it with gardens (below, p. 322).

5. MONUMENTS OF THE SŪR AND MUGHAL DYNASTIES

A vast kingdom in India came under the rule of the Mughals when Bābur defeated and killed Ibrāhīm Lodī, as earlier described (p. 262). The monuments raised during the long rule of the Mughals and during an interregnum when the Sūrs occupied the throne (1538-55), form an important chapter in the narrative of the Islamic architecture in India. The storey is taken up from the few mosques and tombs constructed during the Lodī rule, when art and architecture, in fact, all cultural activity, were showing signs of a stalemate. The Mughals infused fresh blood into the movement and carried it to its pinnacles, which was due largely to their personal interest and patronage, but also to the comparatively peaceful times and general prosperity under them. When, however, the personal interest of the rulers waned, as happened during the rule of the later Mughals, there was an abrupt decline in aesthetic appreciation and architectural enterprise. The following description of the monuments erected

during the reigns of different rulers will illustrate the rise and fall of the Mughal architecture.

A. Bābur (1526-30)

Bābur was a man of culture and exceptional aesthetic taste. He was particularly fond of formal gardens, and at least two gardens are ascribed to him, one at Agra, and the other at Panipat in Karnal District, around the Kābulī-Bāgh-Masjid built by him. In his *Memoirs* he mentions having built a mosque at Agra within the Lodī fort. The Jāmi'-Masjid at Sambhal, in Moradabad District, was also built by him. Otherwise no other monuments built directly under his patronage are known to exist in India. He was not much impressed by the Indian workmen; yet in his *Memoirs* he gives the number of stone-cutters and artisans engaged on his buildings, from which it appears that some of the monuments raised by him have not survived.

There exists, however, at Palam, near Delhi, a small brick-built mosque, with three-arched openings on its façade and a dome on the central bay, with small minarets at the four corners. It was built in 1528-29 during Bābur's rule according to an inscription. The much more ambitious and refined mosque of Jamālī-Kamālī in the Mehrauli area of Delhi was commenced about the same time but completed during Humāyūn's reign (below, p. 304).

B. The Sūr dynasty (1538-55)

After Bābur's death at Agra in 1530, his son, Humāyūn, succeeded him. But he passed through very troubled times as Sher Shāh, whose grandfather Ibrāhīm Khān, an Afghan from Sūr, had entered the

service of Buhlūl Lodī, and who had himself served under Bābur, was now up in arms against Humāyūn and, in 1538, drove him from India, obliging him to take shelter in Iran. Sher Shāh met his end in 1545, but the Sūr dynasty founded by him continued to rule till 1555, when Humāyūn returned, overthrew Sikandar Shāh Sūr and regained his throne.

Sher Shāh was not only a man of exceptional courage and a great administrator, but also devoted to learning and intellectual pursuits. He improved the communications by constructing several roads, with *sarāis* at regular intervals, among which a trunk road from the Indus to Sonargaon in Bengal, passing through Lahore, Delhi and Agra and following an alignment that it bequeathed to the present Grand Trunk Road, is best known. Several forts were also built by him, but as architectural productions his tombs and mosques play a more important rôle in the story of the Indo-Islamic architecture.

Among the *parganas* assigned by Sikandar Lodī to Ḥasan Khān, father of Sher Shāh, was Sasaram in Bihar, and it was here that the latter passed his years of adolescence and later raised some of the tombs, which represent the initial phase of his architectural undertaking. Sher Shāh elaborated the Lodī octagonal pattern in the construction of the tombs, and, in fact, perfected that pattern. The members of his family lie buried in three of the several tombs at Sasaram, while the master-builder, 'Alāwal Khān, is himself buried in another one. The tomb of Sher Shāh's father, Ḥasan Khān, built in about 1535, is, like the Sayyid and Lodī tombs at Delhi, octagonal in plan with a verandah around it, each side pierced by three arches, and the whole surmounted by a large and wide dome. It has, however, no batter, and its verandahs are roofed by three low

domes on each side. The general look and the composition of the structure, however, is impaired, as it rises straight from the ground and the absence of kiosks on the roof of its first storey emphasizes the bareness of its walls on the second storey.

Sher Shāh's own tomb (pl. LXXIII B), built about 1540, is free from these imperfections. Situated within a large tank, 425 m. square, it is 46 m. high and much larger than his father's tomb. It rises from a platform in two terraces, with pillared domes on the upper terrace and matching pillared kiosks on the corners of the roofs of the two storeys above. Screened windows admit light into the interior from the second storey. The eight sides of the ground floor have been multiplied into thirty-two to prepare a suitable base for the dome. Access to the tomb is provided by a causeway from the northern bank, where a dignified domed structure serves as the gate and was perhaps used also as a guardroom. The tomb was originally decorated with coloured tiles, traces only of which now remain.

Sher Shāh also built the tomb of his grandfather, Ibrāhīm Khān, at Narnaul in Mahendragarh District (pl. LXXIII A), where the latter had held an assignment. This tomb follows the design of the square Sayyid and Lodī tombs in Delhi but has certain new features. Its walls simulate a 'double-storeyed' construction, both on the exterior and the interior, with panelled recessed niches, both above and below a string-course. Unlike the Delhi examples, its dome is wide and low, the corners occupied by pillared kiosks and slender decorative turrets (*guldastas*). Originally parts of the structure were faced with enamelled tiles. The use of red and dark grey stones, latticed screens, elegant merlons, ornamental fringes under its arches, a series of lovely turrets,

Quranic inscriptions around its western niches in the interior, medallions in the spandrels of arches, a scheme of horizontal and vertical panelling and a painted ceiling of excellent brushwork—all combine to give it a very rich and effective decorative appearance.

After his enthronement Sher Shāh concentrated his building activities at Delhi, which may be described as the second phase of the Sūr architecture. To begin with, he appears to have razed to the ground the city of Dīnpanāh built by Humāyūn, and on the same site, which was also perhaps the site of Indraprastha, believed to be the capital of the Pāṇḍavas, he raised the citadel of Purāna-Qal'a with an extensive city-area sprawling around it. Among the so-called seven cities of Delhi, the Purānā-Qal'a is the sixth. It seems that the Purānā-Qal'a was still incomplete at Sher Shāh's death in 1545, and was perhaps completed by Humāyūn, although it is not exactly certain which parts were built by the latter.

On plan the Purānā-Qal'a is irregularly oblong with a circuit of 2 km., with its longer sides on the east and west. Its high walls of rubble masonry with a slight batter, 4 m. thick and as much as 21 m. high in places, have a battlemented parapet above the row of arrow-slits, behind which all along the circumference are built a series of chambers in a two-aisle depth. There are massive bastions on the four corners, in addition to five bastions in the western wall, and three gates, all double-storeyed, one on each side except on the east. The gates have a veneer of red and buff sandstones, with an ornamental use of white and black marble and coloured tiles. The city of Sher Shāh around his citadel was extensive, two points on its circumference being perhaps provided by the large and inpressive gates

to the west of Purāna- Qal'a and Koṭlā Fīrūz Shāh on the Delhi-Mathura road, both known as the Kābulī-or Lāl-Darwāza.

The Qal'a-i-Kuhna-Masjid,built by Sher Shāh Sūr inside the Purānā-Qal'a, which served as the Chapel Royal, marks a step forward from the Moṭh-kī-Masjid (above, p. 261). It is, on one hand, anticipatory of the mosque-design as it was to take shape in the early Mughal period, and, on the other, emphasizes the ornate phase of Sher Shāh's architecture, as distinct from the plain treatment noticed in the tombs raised by him. Its rectangular prayer-hall at the western end of a courtyard with a shallow tank in the middle, which was originally provided with a fountain, is entered through five openings with pointed arches inclining towards the four-centred form. The central arch, fringed with lotus-cusps, is framed within decorative bands containing inscriptions and geometrical designs, with thin turrets on the corners. The entrance arch on a recessed plane is likewise treated, with an arched window supported on brackets between the larger arch and the entrance. The flanking arches are also ornamented, but not to the same extent as the central one. Below the merloned parapet runs a *chhajja* supported on brackets.

The inner west wall of the hall is also divided into five arched recesses, which are richly decorated with white and black marble set in geometrical patterns and framed within inscribed bands. The design of the *miḥrāb* is unique, obtained by the sinking of one recess within another, which multiplies the scope for ornamentation. On the northern and southern sides, above the side-entrances are oriel windows, which admit light into the narrow gallery on the second storey running all round the mosque. At the

two rear corners are semi-octagonal three-storeyed towers, with openings on the sides.

To the south of the above mosque is Sher-Manḍal, a double-storeyed octagonal tower of red stone relieved by marble, with a recessed rectangular entrance within an arch on each side, the same scheme repeating itself in the second storey. Perhaps originally constructed as a pleasure-tower, it is believed to have been used by Humāyūn as his library, from the stairs of which he fell down and died.

The successors of Sher Shāh had no particular interest in architecture. The fortress of Salīmgaṛh adjoining the Lāl-Qal'a in Delhi is believed to have been built by Sher Shāh's son, Islām Shāh (1545-54), also known as Salīm Shāh, During his reign in 1547-48 was also built in Delhi, close to where Humāyūn's tomb was built later, the tomb of 'Īsā Khān, a nobleman at Sher Shāh's court, who also served Islām Shāh after Sher Shāh's death. It is an octagonal tomb with verandahs on all sides, and with buttressed corners and *chhajjas* at the cornice. It is sited within an octagonal compound, in place of a square garden lay-out as in the tomb of Sikandar Shāh Lodi (above p. 261), with a mosque on the western side. Islām Shāh's tomb lies at Sasaram. It was planned as a large edifice but was never completed.

C. HUMĀYŪN (1530-38 AND 1555-56)

Humāyūn ascended the throne in 1530, but was pushed out of the country in 1538 by Sher Shāh Sūr (above, p 299). During this reign of eight years, he was continuously engaged in warfare with the provincial governors, in addition to the pressure exerted by Sher Shāh. In these circumstances, he had no

leisure, nor any enthusiasm, for intellectual or cultural pursuits, including architecture. He returned to throne in July 1555, after defeating Sikandar Shāh Sūr but died in January, 1556, which gave him no time even for the consolidation of his empire, much less for other activities. His addiction to drugs also must have sapped him off his verve and industry conducive to such activities.

Yet his reign is not entirely barren. In 1533 he laid the foundations of Dīnpanāh, a new city, on the bank of the Yamuna in Delhi, and it was completed, with its walls, bastions and gates, within the short period of ten months. But no trace of it now remains, as it was pulled down systematically by Sher Shāh Sūr. After regaining his throne, Humāyūn completed the Purānā-Qal'a.

During his reign, was, however, completed at Mehrauli, near Delhi, the Jamālī-Kamālī-Masjid, which had been commenced in about 1528-29 during his father's reign (above, p. 298). Jamālī was the *nom de plume* of Shaikh Fazlu'llāh, a poet, whose tomb, profusely ornamented with glazed tiles and cut plaster lies next to the mosque. The prayer-chamber of the mosque is entered through five arched openings each of an approximately equal size and rather wide in span, the central one lying in a recessed arch and enclosed within bands and carvings of marble. Its central bay alone is surmounted by a high dome. The five recessed niches of its western wall, oriel-windows at the back, octagonal towers at the rear corners and a staircase leading to a narrow gallery on the second storey are some of the features which it shares with the mosque of Sher Shāh. In fact, the Jamālī-Kamālī-Masjid has an important place in the evolution of the Mughal mosque, for it combines in itself features both of Moṭh-kī-Masjid and

Baṛā-Gumbad-Masjid (above. p 260), which had been built in the Lodi times, and of Sher Shāh's mosque built later.

Humāyūn died in 1556, and his widow Ḥamīda Bānū Begam, also known as Hājī Begam, commenced his tomb in 1569, fourteen years after his death. It is the first distinct example of proper Mughal style, which was inspired by Persian architecture. There need be no doubt that Humāyūn picked up the principles of Persian architecture during his exile, and he himself is likely to have planned the tomb, although there is no record to that effect. Mīrak Mīrzā Ghiyāth, a Persian, was the architect employed by Ḥājī Begam for this tomb.

The tomb proper stands in the centre of a square garden, divided into four main parterres by causeways (*chārbāgh*), in the centre of which ran shallow water-channels. The square red sandstone double-storeyed structure of the mausoleum with chamfered corners rises from a 7-m. high square terrace, raised over a series of cells, which are accessible through arches on each side. The grave proper in the centre of this cell-complex is reached by a passage on the south. The octagonal central chamber contains the cenotaph, and the diagonal sides lead to corner-chambers which house the graves of other members of the royal family. Externally each side of the tomb, its elevations decorated by marble borders and panels, is dominated by three arched alcoves, the central one being the highest. Over the roof pillared kiosks are disposed around the high emphatic double dome in the centre.

The mausoleum is a synthesis of Persian architecture and Indian traditions—the former exemplified by the arched alcoves, corridors and the high double dome, and the latter by the kiosks, which

give it a pyramidal outline from distance. Although Sikandar Lodī's tomb was the first garden-tomb to be built in India, it is Humāyūn's tomb which set up a new vogue, the crowning achievement of which is the Tāj at Agra. There is also a somewhat common human impetus behind these two edifices—one erected by a devoted wife for her husband and the other by an equally or more devoted husband for his wife.

There exists a fine tomb in the Lodī style, larger than the examples in Delhi, at Tijara, in District Alwar. It is believed to be the tomb of 'Alāu'd-Dīn 'Ālam Khān or 'Ālam Shāh, brother of Sikandar Lodī, who was governor of Tijara for some time. He lived into Humāyūn's reign, but when actually he died is not known. His massive and impressive tomb may have been built about the middle of the sixteenth century.

D. AKBAR (1556-1605)

At the death of Humāyūn, his elder son, Akbar, was only thirteen, and during his early years of rule, his tutor Bairam Khān acted as the regent. Akbar resisted verbal tuitioning and remained almost illiterate, but acquired a spirit of universal toleration and liberal outlook. Later in life he participated in theological debates between various sects of Islam and listened even to the teachings of other religions. In fact, he tried to promulgate a faith of his own, the Dīn-i-Ilāhī ('Divine Faith'). His relations with the Hindus were most cordial, and he married the Hindu princess of Amber, as also other Rajput princesses, and permitted them to lead their Hindu life at home. Among his trusted Hindu courtiers were Raja Mān Singh of Amber and Raja

Ṭoḍar Mal. He was keenly interested in art and architecture. The Mughal style of painting developed under his guidance, as a result of the fusion of Hindu and Persian techniques. His architecture is characterized equally by a happy blending of the indigenous and Islamic modes of construction and ornamentation. With the exception of Humāyūn's tomb (above, p. 306), in which he does not appear to have taken any personal interest, no distinct Mughal style had taken form yet. Akbar, however, gave it a character of its own for the first time.

Akbar's seat of government was Agra and not Delhi. He demolished the brick fort of the Lodis and gave a new life to the city by raising on the bank of the Yamuna his famous fort, begun in 1565 and completed in 1574. This was the first time when dressed stone was used not only in the palaces but also in the ramparts. With its high walls of a neat sandstone facing, a moat fed by the river, high gateways flanked by bastions, several halls, deliberately arranged palaces along the water-front, mosques, *bāzārs*, baths, gardens and sufficient accommodation for the courtiers, the fort at Agra set a new pattern in the construction of royal citadels that was to serve as a model for later ones. Akbar's buildings were constructed with red sandstone. Unfortunately several of these were remodelled or replaced by Shāhjahān, who preferred marble to sandstone in buildings of personal use. Among the buildings constructed by Akbar in the fort, the Akbarī-Maḥal and the two Mīnā-Bāzārs deserve notice.

All these buildings are of red sandstone, with trabeate construction and restrained ornamentation. Now in ruins, the Akbarī-Maḥal consists of a series of chambers opening into a spacious courtyard. The Jahāngīrī-Maḥal (pl. LXXIX), reputed to have been

built by Akbar for his son Jahāngīr but likely to have been built by Jahāngīr himself, consists of a central courtyard, surrounded by double-storeyed halls and chambers. The jambs, brackets, corbels and lintels of its doorways, with a *chhajja* above them, are profusely sculptured. The different rooms in this palace are believed to have been used for different purposes by the Hindu wives of Akbar and Jahāngīr. While in the long Mīnā-Bāzār, which was originally accessible from the Delhi Gate, a regular market was held, in the smaller Mīnā-Bāzār, near the Mīnā-Masjid, the wives and daughters of the courtiers dressed as tradesmen held a market on the occassion of *Naurūz* ('New Year's Day') as a pastime for the king and his wives, who bargained with them and finally closed the deals by giving them rich presents.

After Akbar had the misfortune of losing his children in their infancy, he was foretold by the saint Shaikh Salīm Chishtī, residing at Fatehpur-Sikri, 35 km. west of Agra, that he would have three sons who would survive. Later he sent his pregnant Rajput wife to reside near the saint, and there three sons were born to her. Akbar, much beholden to the saint, regarded the place as lucky and decided to found a new city there. This city of Fatehpur-Sikri was begun in 1569 and completed in 1574, in the same year in which his Fort at Agra was completed. The city of Fatehpur-Sikri lies on a rocky outcrop, and its sandstone ramparts with bastions and gates enclose an irregularly rectangular area, which is open on the north-west, overlooking a vast reservoir and contains a vast range of halls, palaces, offices, gardens, pleasure-resorts, baths, mosques and tombs. Its lay-out is determined by the rocky topography and consequently lacks a systematic pattern. Almost all the

buildings here were raised by Akbar himself and are characterized largely by trabeate construction. The more important among them are described here.

The Dīwān-i-'Ām, or 'Hall of Public Audience', consists of a large quadrangle enclosed by cloisters, with the emperor's throne on the west, with a screened chamber for the use of the royal ladies. It is, however, the Dīwān-i-Khāss, or 'Hall of Private Audience', which is of a unique design. It is a square chamber, with an opening on each side and a richly-carved column in the centre supporting a magnificent flower-shaped capital. From the circular top of the capital, four passages lead to the corners, and a passage runs right round the walls. It is believed that the central space was occupied by the emperor's throne, while his ministers sat at the corners or on the peripheral passage.

The socalled Turkish Sultana's house, whose fair occupant is unknown, consists of a small chamber surrounded by a verandah. It is beautifully carved both on the outside and inside; particularly remarkable is its wide dado carved with panels portraying jungle-scenes with animals, birds and trees. It is the most ornamented building in Fatehpur-Sikri, described as a 'gigantic jewel-casket' by Fergusson.

The Khwābgāh or 'Sleeping-chamber', a square apartment with a verandah covered by stones chiselled in imitation of tiles, was painted with panels and couplets composed by Salmān Sāwjī in praise of the room and its occupants.

The Panch-Maḥal is a five storeyed pavilion, with each surmounting storey becoming smaller, so that the fifth storey consists only of a single kiosk. The tower was perhaps used for recreation by the emperor and the royal ladies.

Maryam-kī-Koṭhī ('Maryam's house'), also called Sunahrā-Makān, or 'Golden House', consists of a long room with three small rooms at its right angles on the ground floor, with the three rooms repeated on the first floor, and a verandah on three sides. One of the pillars in the verandah is carved with the figures of Rāma and Hanumān—Hindu gods, and the walls are covered with paintings and verses of Akbar's court-poet Faizī. The house is believed to have been occupied by the princess of Amber, who bore three sons to Akbar, including the heir-apparent, and who had the title of Maryamu'z-Zamānī ('Mary of the Age').

Jodh Bāī's palace, the largest domestic building at Fatehpur-Sikri, consists of a courtyard with suites of rooms on its four sides, the construction being double-storeyed in the middle of each side and at the corners. The entrance, through a forecourt, was from the east, while the western block served as a private chapel, with niches to house the images of Hindu deities.

The socalled Birbal's house, or his daughter's house, which does not appear to have been built for or even occupied by either Raja Birbal, a favourite Hindu courtier and a minister, or his daughter, is another attractive building. Double-storeyed, with four rooms on the ground floor and two at the corners on the first floor, roofed by domes, it is richly ornamented with carved designs.

Close to a *sarāi* and on the bank of the reservoir stands a 18-m. high *minār*, octagonal at the base, but circular and tapering above, which is studded with stones in imitation of tusks. It is called Hiran-Minār ('Dear-tower'). Tradition avers it as the burial-place of Akbar's favourite elephant called Ḥarūn, but it is more likely to have been the tower

used for shooting the dear and other animals which came to the reservoir for quenching their thirst.

By far the grandest building at Fatehpur-Sikri is the Jāmi'-Masjid, which heralds the later planning of Shāhjahān's Jāmi'-Masjid at Delhi (below, p. 321). It consists of a large quadrangle enclosed by cloisters and a prayer-hall faced with series of alternating wider and narrower arches and a row of pillared kiosks on the roof, with large domes behind them. The original entrance to the court-yard, is on the east through the Bādshāhī-Darwāza. Later, after Akbar's victory over the Deccan, was added the high gateway on the south, called Baland-Darwāza (pl. LXXX). Approached by a long flight cf steps and with a semi-octagonal projection containing a high arched alcove, through which three doors give access to the courtyard, it is perhaps the most imposing gate in India.

After the death, in 1571, of Shaikh Salīm Chishtī, his tomb was raised in the north-western corner of the compound of the mosque. Comprising a square chamber surrounded by a verandah screened with latticed panels of exquisite design, it is entirely of marble and an elegant structure.

During the early years of Akbar's reign certain buildings were also constructed in Delhi, and he may have been interested even personally in some of them. Adham Khān, son of Māhem Anga, wet nurse of Akbar, and one of Akbar's generals, killed Ataga Khān, a minister and the husband of Jī Jī Anga, another wet nurse. This enraged Akbar who had Adham Khān thrown down from a terrace. Adham Khān's tomb at Mehrauli, built in 1562, is octagonal and is in the Lodī style, with the difference that it lacks the usual *chhajja*. Māhem Anga herself built in 1561-62 the Khairu'l-Manāzil mosque in

front of the Purānā-Qal'a. With its prayer-hall entered through five arches, three domes, double-storeyed cloisters which served as a *madrasa*, stucco and glazed tile decoration, and an imposing gateway, it is an impressive structure.

Ataga Khān's tomb, built in 1566-67 in Nizamuddin, is a square chamber within a walled enclosure. Constructed of red sandstone, inlaid with marble and other coloured stones, and originally effectively ornamented with coloured tiles on the interior, with three recessed arches on the sides, it is an architectural gem.

Outside Delhi and Agra, Akbar built citadels or forts at Ajmer and Allahabad and on the Hari-Parbat at Srinagar, the last re-introducing the use of stone in Kashmir. A mosque was also added by him close to Khwāja Mu'inu'd-Din Chistti's tomb at Ajmer. At Jaunpur, a fine bridge over the Gomati, with a pavilion over each pier, was built between 1564 and 1568. To his reign also belongs the tomb of Muḥammad Ghauth, a saint and teacher, which was built at Gwalior about 1564 and combines the construction in the Lodī style with ornamentation of Gujarat tradition, as noticed particularly in its perforated screens.

E. JAHĀNGĪR (1605-27)

After Akbar's death in 1605, his son Salīm by the Amber princess, ascended the throne at Agra under the name of Jahāngir. By nature he was pleasure-loving and fond of natural beauty and was well-versed in Persian literature and even given to composing verses at times. Miniature-painting attracted him most, and, in fact, the development of Mughal painting owes in no small measure to his direct

patronage. He had, however, little interest in architecture.

He spent the greater part of his life at Lahore and Kabul, and this may account for his interest in developing communications, by making roads and erecting *kos-minārs* ('mile'-stones), bridges and *sarāis*. Bārapula, a long bridge over a *nālā* in Delhi, belongs to his reign. A *sarāi*, called Nūr-Maḥal, in Jullundur district, along the old Grand Trunk Road, contains an impressive gateway.

The construction of his own tomb by Akbar at Sikandara near Agra had been going on for three years when death overtook him. Jahāngir did not like its design and changed it. He completed the tomb in 1613, in the seventh year of his reign. The tomb lies in the centre of a large garden enclosed by battlemented walls, and divided into squares and provided with channels and fountains in the fashion of Mughal gardens. An imposing gateway, built with sandstone but profusely decorated with inlay of marble and other coloured stones rises from the middle of each side, actual entrance being had only from the gateway on the west, others being closed. The main entrance is provided with tall *minārs* on the corners, a feature to be seen for the first time in Mughal monuments.

The tomb proper rises from a raised terrace of red stone with façades of series of arches, broken by a marble gateway, one of which leads to the grave proper. Above the terrace the building is in four storeys, the lower three consisting of pillared arcades, on the top of which the tomb is enclosed within marble cloisters closed on the outside by latticed screens. On the tomb is inscribed the formula of the faith promulgated by Akbar and the ninetynine attributes of God. With its solid wide

base, but with open arcades and truncated top, the tomb lacks coherence. Outside the enclosure of the tomb the now-derelict Kānch-Maḥal, a double-storeyed building, was also built by Jahāngīr; it shows evidence of an effective decoration achieved by the combined use of enamelled tiles and coloured inlay of stones.

The Muthamman-Burj, a double-storeyed pavilion in the Agra Fort, with beautiful inlay, is also ascribed to Jahāngīr. But the most important building of his reign is the tomb of Ī'timādu'd-Daula, begun in 1622 and completed in 1628 by his queen, Nur-jahān, to inter the bodily remains of her father, Mīrzā Ghiyāth Baig, who rose to become the high chamberlain and prime minister to Jahāngīr. Lying within a small garden-enclosure, with an entrance of sandstone, it is a square building with a grave-chamber surrounded by verandahs. On the upper storey a pavilion with rectangular dome and screens on the sides enclosed the false graves of I'timādu'd-Daula and his wife. The entire structure is in marble and is richly decorated with delicate inlay and paintings containing the characteristic Persian motifs, such as cypress trees, vases, fruits, vines and wine-cups. The tomb occupies an important place in the development of garden-tombs and reveals a phase of transition between the two great epochs of Mughal architecture, that of Akbar and Shāhjahān. Akbar's sandstone has here given place to marble, but his subdued proportions and restrained ornamentation still linger on, while the central flattish dome raised on a rectangular base savours of Rajput architecture. The minarets on the four corners, although short, and the fine latticework, traceries and inlay herald the techniques employed so effectively by Shāhjahān in the Tāj-Maḥal (below, p. 318).

In Delhi certain monuments were raised towards the later part of Jahāngīr's reign. The Chaunsath-Khamba ('Sixtyfour Pillars') in Nizamuddin, with its sixty-four pillars, was built as his tomb by Mīrzā 'Azīz Kokaltāsh, son of Jī Jī Anga and Ataga Khān, in 1623-24, during his lifetime. Bairam Khān's son, Mīrzā 'Abdu'r-Rahīm Khān-i-Khānān, who served both Akbar and Jahāngīr and was a scholar knowing several languages writing couplets in Hindi under the familiar name of Rahīm, lies buried in a massive tomb close to Nizamuddin. Originally faced with red sandstone, relieved by the use of buff sandstone and marble, its design is similar to that of Humāyūn's tomb, its interior decorated with incised and painted plaster. The tomb is now bereft of its facing, as these stones were stripped off later to build Safdar-Jang's tomb (below, p. 324).

At Srinagar in Kashmir, Nūrjahān built the Patthar-Masjid, while Jahāngīr engaged himself in arranging the gardens. Jahāngīr also added to the fort at Lahore. He died in 1627 on his way back from Kashmir, and his tomb at Shahdara near Lahore was built later by his devoted queen.

F. Shāhjahān (1628-58)

Jahāngīr died in 1627, but Shāhjahān ascended the throne only in 1628, after Dāwar Bakhsh, son of Khusraw, Shāhjahān's elder brother, had ruled for a while and other rivals had been put out of the way. Shāhjahān inherited the artistic taste of his father, but his interest went beyond. It was architecture which gripped and gratified him and remained his life-long passion.

By the time Shāhjahān came to the throne, the Mughal empire had at its back almost a continuity

of just over a century, during which the artistic traditions had become mature and refined. To these were added Shāhjahān's personal interest and patronage, and the result was a remarkable efflorescence of architecture.

Shāhjahān preferred marble to other stones. His buildings are characterized by a form and feeling of feminity, sensuousness and delicateness, as distinct from the sturdy, robust and relatively plain appearrance of the constructions of Akbar. Ornamentation, therefore, naturally plays a dominant rôle in his buildings. The chaste and simple relief-work on the red sandstone now gave way to delicate carvings in marble, almost like filigree, and to fine inlay and painting. The arch became foliated, and the dome received a Persian form, bulbous in outline and constricted at the neck. The pillars are raised with shafts resting on foliated bases and crowned by involuted bracket-capitals.

Shāhjahān replanned the forts at Lahore and Agra and added several buildings within them. In the latter, he even demolished some buildings of sandstone and replaced them by marble ones. The Khāss-Maḥal, Machchhī-Bhawan, Dīwān-i-'Am, Dīwān-i-Khāss and Moti-Masjid are some of the buildings erected by him in that fort. They are all in marble, displaying tapering shafts, engrailed arches and beautiful relief and inlay-work in coloured stones.

The Khāss-Maḥal ('Private Palace'), built about 1636, overlooks the river and consists of an open pillared pavilion, with five bays in front and three on the sides, flanked by a pavilion each on the north and south, their middle portion covered by 'Bengal' roofs. The courtyard of the Machchhī-Bhawan ('Fish Palace') is enclosed on three sides with arched

double-storeyed chambers, with a screen on the riverside. It is said that originally it had marble tanks, which contained fish of gold and silver colours, from which it derives its name.

The Dīwān-i-'Ām ('Hall of Public Audience') is a large rectangular courtyard with entrances on the north and south, series of cells on three sides, and with a pillared hall in the middle of the fourth western side. The Dīwān-i-Khāss ('Hall of Private Audience'), built in 1634-37, consists of an outer hall and an inner hall, communicating with each other through three archways. The three-domed Motī-Masjid ('Pearl Mosque'), which took Shāhjahān seven years to build at a cost of three lakhs of rupees, is by far the noblest building erected by him in the Agra fort. It rises from a vaulted terrace and contains cloisters on three sides and a marble prayer-hall on the west.

About the same time that Shāhjahān built his Jāmi'-Masjid in Delhi (below, p. 321), he also constructed in 1648 the Jāmi'-Masjid at Agra, in honour of his daughter, Jahānārā. It follows the conventional pattern but is half the size of the Delhi mosque. With four-centred arches in place of the usual foliated ones, low domes inlaid with black marble stripes on herring-bone pattern, slender pinnacles flanking the entrance to its prayer-hall, a row of kiosks above the parapet, and without minarets, it looks distinguished but stands no comparison with the Jāmi'-Masjid at Delhi.

The highest of Shāhjahān's achievements, however, is the Tāj-Maḥal (pl. LXXXI), tomb of his beloved wife Arjmand Bānū Begam, entitled Mumtāz Maḥal. She died at Burhanpur in 1631, during his campaign in the Deccan and her body was brought to Agra. At the emperor's order, several designs were received

for the tomb, but the one accepted is said to be by Ustād 'Īsā, a master-builder from Persia. The tomb was commenced by Shāhjahān about 1632, before beginning his constructions in the fort, and took him seventeen years to complete according to some and twentytwo according to others.

The Tāj-Maḥal is the culmination of the conception of a garden-tomb, which had a modest beginning in Sikandar Lodi's tomb, but had advanced to a mature stage in Humāyūn's tomb, both at Delhi (above, pp. 260 and 305). Lying on the left bank of the Yamuna, its rectangular enclosure walled up on three sides, the marble tomb occupies the middle of the fourth side, along the river, with a red sandstone mosque on the west and a matching hall, described as *jawāb* or 'answer', on the east, the latter to serve as a guest-house (*mihmān-khāna*) or assembly-hall (*majlis-khāna*). The square tomb with chamfered corners is built on a raised terrace, with graceful tall minarets at its four corners. As in the Humāyūn's tomb, the tomb-chamber is octagonal, with subsidiary chambers at the angles. This plan is repeated on the second storey, and the building is surmounted by a graceful double dome. In the basement are the graves of Mumtāz Maḥal and Shāhjahān, enclosed within railings of beautifully worked perforated screens.

The Tāj is noted for its graceful proportions and the satisfying balance between the claims of architecture and ornamentation. The profuse use of semi-precious and multi-coloured stones in its floral and arabesque patterns, fine borders, inscriptions in black marble, low relief-carvings, delicate traceries and trelliswork, all executed in or against the background of white marble, lend a unique charm to this world-famous edifice.

In 1638 Shāhjahān transferred his capital from Agra to Delhi and laid the foundations of Shāhjahānābād, the seventh city of Delhi. It is enclosed by a rubble stone wall, with bastions, gates and wickets at intervals. Of its fourteen gates, the important ones are the Morī, Lāhorī, Ajmerī, Turkmān, Kāshmīrī and Delhi gates, some of which have already been demolished. His famous citadel, the Lāl-Qal'a, or the Red Fort, lying at the town's northern end on the right bank of the Yamuna and south of Salīmgarh (p. 303), was begun in 1639 and completed after nine years. The Red Fort is different from the Agra fort and is better planned, because at its back lies the experience gained by Shāhjahān at Agra, and because it was the work of one hand. It is an irregular octagon, with two long sides on the east and west, and with two main gates, one on the west and the other on the south, called Lāhorī and Delhi gates respectively. While the walls, gates and a few other structures in the fort are constructed of red sandstone, marble has been largely used in the palaces.

From the western gateway after passing through the vaulted arcade, called Chhatta-Chowk, one reaches the Naubat- or Naqqār-Khāna ('Drum-house'), where ceremonial music was played and which also served as the entrance to the Dīwān-i-'Ām. Its upper storey is now occupied by the Indian War Memorial Museum.

The Dīwān-i-'Ām ('Hall of Public Audience') is a rectangular hall, three aisle deep, with a façade of nine arches. At the back of the hall is an alcove, where the royal throne stood under a marble canopy, with an inlaid marble dias below it for the prime minister. The wall behind the throne is ornamented with beautiful panels of *pietra dura* work, said to

have been executed by Austin de Bordeaux, a Florentine artist. Orpheus with his lute is represented in one of the panels here.

Originally there were six marble palaces along the eastern water front. Behind the Dīwān-i-'Ām but separated by a court is the Rang-Maḥal ('Painted Palace'), so called owing to coloured decoration on its interior. It consists of a main hall with an arched front, with vaulted chambers on either end. A water-channel, called the Nahr-i-Bihisht ('Stream of Paradise'), ran down through it, with a central marble basin fitted with an ivory fountain. The Mumtāz-Mahal, originally an important apartment in the imperial seraglio, now houses the Delhi Fort Museum.

The Dīwān-i-Khāss ('Hall of Private Audience') is a highly-ornamented pillared hall, with a flat ceiling supported on engrailed arches. The lower portion of its piers is ornamented with floral *pietra dura* panels, while the upper portion was originally gilded and painted. Its marble dias is said to have supported the famous Peacock Throne, carried away by the Persian invader Nādir Shāh.

The Tasbīḥ-Khāna ('chamber for counting beads for private prayers') consists of three rooms, behind which is the Khwābgāh ('sleeping-chamber'). On the northern screen of the former is a representation of the Scales of Justice, which are suspended over a crescent amidst stars and clouds. Adjoining the eastern wall of the Khwābgāh is the octagonal Muthamman-Burj, from where the emperor appeared before his subjects every morning. A small balcony, which projects from the Burj, was added here in 1808 by Akbar Shāh II, and it was from this balcony that King George V and Queen Mary appeared before the people of Delhi in December 1911.

The Hammām ('Bath') consists of three main apartments divided by corridors. The entire interior, including the floor, is built of marble and inlaid with coloured stones. The baths were provided with hot and cold water, and it is said that one of the fountains in the easternmost apartment emitted rose-water. To the west of the Hammām is the Motī-Masjid ('Pearl Mosque'), added later by Aurangzeb (below, p. 323). The Hayāt-Bakhsh-Bāgh ('Life-giving garden'), with its pavilions, lies to the north of the mosque, and was later considerably altered and reconstructed. The red-stone pavilion in the middle of the tank in the centre of the Hayāt-Bakhsh-Bāgh is called Zafar-Maḥal and was built by Bahādur Shāh II in about 1842.

In 1644, Shāhjahān commenced in Delhi his great mosque, the Jāmi'-Masjid, the largest mosque in India, and completed it in 1650. Its square quadrangle with arched cloisters on the sides and a tank in the centre is 100 m. wide. Built on a raised plinth, it has three imposing gateways approached by long flights of steps. Its prayer-hall, with a façade of eleven arches, flanked by a four-storeyed minaret on either end, is covered by three large domes ornamented with alternating stripes of black and white marble.

Among other buildings of Shāhjahān's reign in Delhi, important for their association with the royal family, mention may be made of the tombs of Jahānārā and Raushanārā, his daughters. Raushanārā laid out her garden-tomb in 1650, soon after her father had completed Shāhjahānābād. Jahānārā's tomb in Nizamuddin, built by her in 1681 during her lifetime, consists of an unroofed small enclosure, the walls of which are screened with perforated marble slabs. The hollow receptacle on the upper surface of the grave is filled with grass in

accordance with the inscription on it, reading 'Let naught cover my grave save the green grass: for grass well suffices as a covering for the grave of the lowly.' One of the wives of Shāhjahān, Fateḥpurī Begam, built in 1650 the famous Fateḥpurī mosque in Delhi on the conventional pattern.

Enamelled tiles, which had gained roots at Lahore as the main decorating medium, also penetrated to Agra, as seen in the Chīnī-kā-Rauza, tomb of Afzal Khān, built during Shāhjahān's reign. At Srinagar in Kashmir, where stone had been brought into use again, in about 1649 was built the Akhund Mullā Shāh's mosque, with brick core and grey granite facing. Kashmir was, however, enriched by Shāhjahān by laying terraces in the Shālimār and Nishāt gardens.

G. Aurangzeb (1658-1707)

Aurangzeb imprisoned his father Shāhjahān, and crowned himself as emperor at Delhi in July 1658, at the Shālimār garden, which contains now only some derelict buildings with patches of floral paintings. After gaining victory over his other three brothers or killing them, he celebrated a second coronation in June, 1659, again at Delhi. The Mughal empire, however, had now started disintegrating, owing to his puritanical beliefs, bigoted behaviour and other external factors. The cultural and intellectual enterprises suffered still worse. With his accession, architecture and fine arts succumbed to a deterioration and oblivion, from which they were never to emerge during the rule of the Mughals. This was no doubt due in a substantial measure to the dislike of arts by the emperor himself.

Shāhjahān's disposition and that of Aurangzeb form a study in contrast. While Shāhjahān joined his subjects in festivities and prayers, and his Jāmi'-Masjid at Delhi was used both by him and his people, Aurangzeb led an isolated life, withdrawing his whole self unto himself. In the Red Fort at Delhi, he built in 1659-60 the small Motī Masjid ('Pearl Mosque') for his private use. At Agra, the Nagīna-Masjid ('Gem Mosque') is also said to have been built by him, for the same purpose, although some authorities would ascribe it to Shāhjahān himself. The Motī-Masjid, entirely of marble, follows the conventional pattern. With its white surface relieved by borders and other designs in black marble, it is no doubt a dainty masterpiece, although its three domes, originally gilded with copper, are perhaps a little too rounded and interfere with its look. Aurangzeb also made some additions to the forts at Delhi and Agra, such as the barbicans in front of the gateways at the former.

The beautiful Zīnatu'l-Masājidin Delhi, built by Aurangzeb's daughter, Zīnatu'n-Nisā Begam, perhaps in about 1711, after her father's death, may be noticed here. Much smaller than the Jāmi'-Masjid built by her grandfather, it resembles it all the same, with its red sandstone facing, white marble domes with black marble flutings and tall minarets.

The reign of Aurangzeb falls into two periods. During the first half, his activities and interests were concentrated in the north; in the second half, his court and family moved to Aurangabad, from where he directed his campaigns in the Deccan. In fact, Aurangabad, was now called the 'Delhi of the South'. To this period belongs the Bībī-kā-Maqbara or the tomb of Rābi'atu'd-Daurānī, Aurangzeb's wife, which was built in 1678 by her son. It

is candidly a replica of the Tāj-Maḥal, a little more than half its size, but the result is highly unsatisfying, if not mediocre, on account of its inelegant proportions and exaggerated embellishment. Its screen enclosing the grave, however, is very finely carved with competent workmanship.

H. The Later Mughals (1707-1857)

Aurangzeb died in 1707, and the Mughal empire now disintegrated fast, although the successors of the great Mughals continued reigning over the dismembered dominions till 1857. This period was marked by mutual dissensions, gradual entrenchment of foreign powers and raids by the Persian adventurers Nādir Shāh and his successor in Afghanistan, Aḥmad Shāh Durrānī. The kings had neither the resources, nor inclination, to erect any major monuments. The only exception is provided by the tomb of Mīrzā Muqīm Abul-Mansūr Khān, entitled Safdar-Jang, who was the viceroy of Oudh under Muḥammad Shāh (1719-48) and later on prime minister under Aḥmad Shāh (1748-54). The tomb was built in about 1754 by Shujā'u'd-Daula, Safdar Jang's son. The tomb is the last example of the pattern which began with Humāyūn's tomb. Enclosed within a large garden, divided into squares on the *chārbāgh* pattern, with tanks and fountains along the central pathway, with a gate on the east and pavilions on the other three sides, the tomb proper stands out in the centre of the enclosure. It is a square double-storeyed structure built on a raised terrace and surmounted by a bulbous dome of marble. Red and buff sandstone has been used in its facing, a large proportion of which was stripped off from 'Abdu'r-Raḥīm Khān-i-Khānān's tomb (above p. 315). The marble panels on

its corner-towers are pleasing but rather florid. In fact, its exaggerated ornamentation and lack of proportions, evidenced particularly by its vertical elevation, rob it of the character of a great building, although it has been rightly described as 'the last flicker in the lamp of Mughal architecture at Delhi'.

6. MONUMENTS OF THE NAWABS OF OUDH AND SULTANS OF MYSORE

Late in the eighteenth century, the Nawabs of Oudh became independent, bound by certain treaties with the British, and the centre of political power shifted to that quarter. So did the patronage of arts, architecture and literary pursuits. At Lucknow, which was the capital of Oudh, numerous buildings were erected by the Nawabs. They fall into two phases : an earlier one which succeeded the declining Mughal style of Delhi, and a later one which also incorporated certain features of European architecture. In both, brick was the main building material, while ornamentation was executed in plaster. To the earlier phase belong the Imāmbāṛa, with its mosques, courts and gateways, all built by Nawab Āsafu'd-Daula (1775-95). These buildings are spacious and impressive, but their ornament is too florid. The second phase was inspired by a chateau built in a bizarre European fashion by General Claude Hastin (1735-1800), a French adventurer in the employ of the Nawabs. From it the Nawabs incorporated triangular pediments, Corinthian capitals, and circular Roman arches, and combined them with the indigenous fluted domes, ogee arches and arabesque patterns. Buildings in this hybrid character are the Chhattar-Manzils and the gateways to Sikandara-Bāgh and Kaisar-Bāgh.

In south India, at Mysore, where Haidar 'Ali, the chief minister of the Hindu kingdom, had usurped the throne in 1761, some monuments were erected by his son, Ṭipū Sultan, in a distinct style which deserves mention. It is characterized by engrailed arches, octagonal multi-storeyed minarets, turrets of the same appearance and a hemispherical but flattened dome, with a frieze of petals at the neck. The Darya-Daulat-Bāgh contains a pavilion of graceful proportions with mural paintings and served as a place of retreat. The Gumbaz, where Haidar 'Alī, and Ṭipū Sultan and his mother lie buried, is a square structure, surrounded by a corridor, with minarets at the corners and a typical dome in the centre with turrets around it. The Jāmi'-'Masjid in the fort also contains typical minarets, with numerous pigeon-holes disposed over its body.

7. OTHER FORTS AND PALACES

Not many palaces of the early Hindu rulers of medieval times have survived. It is clear, however, that certain features which characterize the Islamic construction were not confined merely to Muslim forts, palaces, mosques and tombs, but were also incorporated by the Hindus, who also made use of some of the indigenous features, and planned their buildings to suit their customs and ways of living.

Rajasthan, central India and parts of south India are rich in such palaces. Among the pre-Mughal Hindu palaces the only one of note is the Mān-Mandir in the fort at Gwalior built by Raja Mān Singh (1486-1516). Situated as it is on a cliff, the long façade of the fort broken by circular towers at regular intervals crowned with domed cupolas, the principal ones among which were originally gilded by copper,

it is at once striking (pl. LXXXIIA). Balconied windows with their roofs finishing in small pyramidal tops and arcades of sunk corbelled arches, the whole surmounted by a running *chhajja*, are other features of its façade. Within, the courtyards have beautifully carved corbelled openings, corrugated roofs, and glazed tiles of Hindu designs. The rooms are, however, small. Bābur was impressed only by this one among the Hindu palaces, and Akbar no doubt borrowed some of the architectural features from it.

The palaces built during the Mughal times may be different from each other in plan, but they have certain common architectural features, such as balconies supported on carved brackets, pillared kiosks crowned by domes, arcades of sunk arches, foliated arches, latticed screens, curved 'Bengal' eaves and flat domes rising from a rectangular base. Situated as these palaces often are on rocky heights, they look very impressive. Among the important palaces may be named those at Amber, Jaipur, Bikaner, Jodhpur, Udaipur, Jaisalmer, Orchha and Datia.

In south India, the Islamic principles of construction penetrated into the Hindu palaces much more gradually. At Hampi, the capital of the Vijayanagara kingdom, about 1575 was built the double-storeyed pavilion called the 'Lotus'-Maḥal on a square plan with double recesses at the corners. While its pillars and concentrically recessed arches are Islamic, the pyramidal roofs of its pavilions, *chhajjas* and stucco decoration are Hindu. The three-storeyed palace at Chandragiri (pl. LXXXII B), built early in the seventeenth century, is much larger; but here again, the façade has series of arches, while towers at the corners and above the entrance are pyramidal. The palace of Tirumala Nāyaka (1623-59), at Madura, contains aisles of massive round columns derived

from European architecture. Although impressive, it hardly possesses dignity or coherence.

Y. D. SHARMA

Fig. 5

IX. MUSEUMS [1]

CONTENTS

1. INTRODUCTION

THE MUSEUMS IN INDIA HAVE A MARKED BIAS IN FAVOUR of archaeological material: out of a total number of somewhat less than two hundred museums, more than one hundred are meant either exclusively or largely for antiquarian exhibits. The earliest museums, however, had no such predilection, specially in their initial years, when collections pertaining to geology

[1] For places where museums are located see map, fig. 6, p. 355.

and natural history took the place of honour. Writing in 1936, Markham and Hargreaves observed : 'This bias (for archaeology) is understandable when we realise the pride that the cultured Indian takes in the history of his country, and the comparative ease with which archaeological material can be secured.' The statement cannot be regarded as wholly correct : actually, the bias was the outcome of certain trends of historical circumstances and was by no means the sole precondition for the growth of museums in the country. The awareness of the Indian people of their proud cultural heritage is itself a historical phenomenon born out of the endeavours of a few European savants in the late eighteenth and nineteenth centuries, at times promoted by other factors ; had this awareness been present earlier, India would certainly not have waited for a Jones and a Cunningham for the inauguration of her oriental studies and archaeological pursuits. Furthermore, the easy availability of material does not by itself presuppose museums to house it unless favourable factors for their growth are present. In fact, *disjecta membra* of ancient monuments as well as detached archaeological remains abounded on the soil all the while; yet no museums had been organized before the introduction of new ideas. This was because that the concept of preserving objects as relics of the past, as the epitome of national glory, did not exist earlier even in a dormant state. This and many other allied trends come out in relief once the history of museums in India is traced.

2. GROWTH OF MUSEUMS

A. Early phase (1784-1857)

Ancient literature no doubt speaks of *chitraśālā* (picture-gallery), etc. Also there are records of royal

antiquarians like Fīrūz Shāh Tughluq (1351-88), who went to the extent of bringing two colossal Aśokan pillars from distant places to his capital, Delhi. Yet museums as one understands today did not exist either in ancient or medieval India. The foundation of great museums in some European capitals in the second half of the eighteenth and early nineteenth centuries must have inspired the building of museums on those lines at the important centres of British administration in India. In fact, the first museum-collection in India dates as long back as 1796—only forty years after the inception of the British Museum in London and three years after France had thrown open the palace of the Louvre as the museum of the Republic—an act that thrilled the world. In that year, 1796, the Asiatic Society (later on successively called the Asiatic Society of Bengal and the Royal Asiatic Society of Bengal and now again the Asiatic Society), founded in Calcutta in 1784 by a band of enthusiasts led by the brilliant scholar Sir William Jones, felt the need to house the many 'curiosities' that had accumulated as a result of the collection of archaeological, ethnological, geological and zoological specimens by its members. But it was not until 1814 that the Society was able to establish a museum, and that was because in that year Dr. Nathaniel Wallich, a Danish botanist, offered his honorary services as the curator and thus became the first curator of the first museum in India. The Asiatic Society Museum then had two sections—the first dealing with archaeology, ethnology and technology under the care of the librarian of the Society and the second with geology and zoology under the charge of Wallich; the second section, specially the zoological part of it, had a rapid growth. It was only since 1862 —a year after the formation of the Archaeological

Survey of India—that archaeology came to the fore in the Museum, thanks to Sir Alexander Cunningham whose indefatigable zeal in the collection and study of archaeological material not only greatly augmented the archaeological collection of the Museum but also aroused widespread interest in Indian archaeology. It is this Asiatic Society Museum that provided the nucleus of the Indian Museum founded under the Indian Museum Act, 1866, though the present building in Chowringhee was made available later on, in 1875.

An effort to build up a museum in Madras had been made as early as 1819, but with hardly any result. In 1843 the Madras Literary Society, a branch of the Royal Asiatic Society, requested the Government to form a museum of economic geology. The Court of Directors of the East India Company agreed to this proposal, and the Central Museum, originally intended to be a real 'central' museum with branches, was opened in 1851 at the College of Fort St. George, wherefrom it moved to the present building of the Museum in Egmore in 1854. The personal enthusiasm of Assistant Surgeon Edward Green Balfour, who offered his services to be the officer-in-charge in 1850, was mainly responsible for the rapid growth of the Museum, which, by 1856, had established six local museums; but all of them except one had to be closed down within five years of their birth.

During this period, about a dozen museums, including those of Bombay and Karachi, the latter now in Pakistan, came into being. Their growth was largely due to the initiative of European individuals, often backed by the Government, which enabled them to come up and survive. Impetus for their emergence in the fifties of the century was also provided by the Great Exhibition of 1851 in London. By and large these museums had no special bias for archaeology,

which formed only a part of their total collection, the emphasis being generally on geology and other natural sciences, and this was motivated to a great extent by the necessity of assessing the natural wealth of the country; they were essentially research-museums, the concept of public museums being then far off.

B. Participation of Indian States (1857-98)

This period is notable for the fact that for the first time the rulers of Indian States came forward to participate in the museum-movement; ten out of the sixteen museums that sprang up during the period owed their origin to the munificence of such rulers. The Maharaja of Travancore patronized the building up of a museum at Trivandrum in 1857; shortly afterwards, in 1866, Mysore organized one at Bangalore. As soon as the repercussions of the upheaval of 1857 were over, two museums in British India were established in 1863, one at Lucknow and the other at Nagpur. A fresh impetus both in the British territory and in the Indian States was provided by the celebration of the Jubilee of Queen Victoria in 1887; the museums at Jaipur, Udaipur, Rajkot, Vijayawada, etc., were its outcome. The starting of the Raipur Museum in 1875 out of the gift of Mahant Ghasidas, Chief of Nandgaon, shows, however feebly, the rising public interest in the movement.

Amongst the museums of this era, the one at Mathura (later on the Curzon Museum of Archaeology and now the Museum of Archaeology), started in 1874 by F.S. Growse, stands as a landmark in the history of the archaeological museums in India, as this was the first museum housing exclusively archaeological relics derived from a particular region and may be therefore regarded as the forerunner of the

'local museums' that became a conspicuous feature in the succeeding period.

C. FROM CURZON TO MARSHALL (1898-1928)

The arrival of Curzon as Viceroy in 1898 and the the appointment of John Marshall as the Director General of Archaeology in India in 1902 opened a new era in the history of museums in India, which resulted in creating not less than thirty museums—all with an entirely archaeological orientation—spread all over India. The Archaeological Survey of India itself founded local museums at Sarnath (1904), Agra (1906), Ajmer (1908), Delhi Fort (1909), Bijapur (1912), Nalanda (1917) and Sanchi (1919), besides others—some of them now in Pakistan. Markam and Hargreaves observe : 'It has been the policy of the Government of India to keep the small and movable antiquities, recovered from the ancient sites, in close association with the remains to which they belong, so that they may be studied amid their natural surroundings and not lose focus by being transported.' This commendable practice, prevalent also outside India, has had its continuity in the post-Independence period, in spite of occasional and ill-informed criticism. In 1939 Sir Leonard Woolley recommended the closing down of the most of the local museums maintained by the Archaeological Survey of India, but the Government of India did not rightly agree to this.

A new tendency in the form of organizing museums in learned societies made its appearance : museums of the Bangiya Sahitya Parishad, Calcutta (1910), Bharatiya Itihasa Samshodhak Mandal, Poona (1910), and Andhra Historical Research Society, Rajahmundry (1928), belong to this category. Further, the Indian States went ahead with the starting of museums in their respective regions.

The origin of the museums of this period may be ascribed to four different sources of patronage, viz., (i) Government (generally the Archaeological Survey of India), (ii) the Indian States, (iii) learned societies and (iv) civic bodies and private individuals. The participation of European individuals was no longer a factor to be reckoned with.

Three out of the four above-mentioned sources combined to give birth to the Prince of Wales Museum of Western India in Bombay. In 1904, the Government of Bombay appointed a committee to examine the question of having a museum for the city. In 1905, the people of Bombay decided that a public museum should be a fitting permanent memorial to the visit to the city of their Royal Highnesses the Prince and Princess of Wales. The site on which the present Prince of Wales Museum stands was given by the Bombay Government, which also assured yearly grants. The Bombay Municipality constituted a fund of 300,000 rupees for its running. Sir Currimbhoy Ibrahim added to it an equivalent sum and Sir Cowasji Jehangir 50,000 rupees as their donations. The Museum was thrown open to the public in 1921.

D. Period of Popular Participation (1928-47)

Out of about three dozen museums that came into being between 1928 and 1947, about a dozen owed their origin exclusively or largely to the efforts of the private organizations or individuals. By then the museum-movement had taken its roots in the soil and despite a world-wide depression, which hit the Archaeological Survey hard, and the Second World War, the period produced a fairly rich crop of museums. The Indian States were again at the fore and gave rise to at least

seventeen museums. More museums in the premises of the learned societies, such as the Rajwade Samshodhan Mandal (1932) and Kannada Research Society (1904), were set up. It is interesting to note that the collection of the Kamarupa Anusandhan Samiti, Gauhati, and the collections of two professors of the Ravenshaw College, Cuttack, eventually grew into the Provincial Museums of Assam and Orissa respectively. Municipalities and other civic and corporate bodies also rose to the occasion and accelerated the pace of the movement. Universities did not lag behind, the first university museum of archaeology being the Asutosh Museum of Fine (now Indian) Art founded in 1937 by the University of Calcutta.[1] Another new aspect was the rise of temple museums in the south under the patronage of the Devasthanam Committees; one such museum, organized in 1935, is Sriranganathasvami etc. Devasthanam's museum at Srirangam. All these developments show that in the growth of the archaeological museums during this period the Government, or more precisely the Archaeological Survey of India, was not the only participant. Markham and Hargreaves are right in stating : 'The discoveries of the Archaeological Survey, by adding so substantially to the history of India and awakening world-wide interest in its art and antiquities, have stimulated in no small measure feelings of nationalism and directed the attention of Indians to the need for preserving their archaeological treasures, which generally have added virtue of being more pest-resistant than most material.' The seed that had been sown in the preceding period thus started reaping fruits in this, which witnessed, as well, the mass-awakening in

[1] It may be mentioned here that the first college museum in India was set up by the pioneer missionary William Carey at Serampore, West Bengal, as early as 1818.

India; perhaps the museum-movement reflects something of that national upheaval.

During this period the Archaeological Survey, once the pioneer in the movement, played a subdued rôle, largely owing to financial difficulties; notable, however, is the organization, in 1929, of the Central Asian Antiquities Museum (now merged with the National Museum) at New Delhi, formed out of the collections of Sir Aurel Stein from his expeditions to Chinese Turkestan. The closing years of this period, with the coming of Dr. (now Sir) Mortimer Wheeler as the Director General of Archaeology in India, brought indications of a great change—the centralization of direction in local museums of the Archaeological Survey of India and the proposal for the formation of a National Museum of Art, Archaeology and Anthropology. Thus, the recommendations of the Markham-Hargreaves report that the museums of the Archaeological Survey of India should be brought together under one administrative control was given effect to in 1946, when a Museums Branch came into existence within the Survey. This was a great contribution to an expanding movement, which, together with infusion of the idea of a National Museum, was then practically on the threshold of a revolutionary change. 'The question of the fomation of a National Museum of India', says Ghosh, 'had been sporadically receiving the attention of the Government for a long time. The first effective step towards the establishment of such a museum was taken in 1945, when, on the initiative of Wheeler, a committee, with Sir Maurice Gwyer as the Chairman, was set up to report on the functions, administration, organization, etc., of the Museum. The committee reported in 1946, and from then to 1949, when the Museum was inaugurated, Wheeler and his successor vigorously

pursued the matter so that it was not shelved once again.'

E. Post-Independence period (1947-63)

The greatest event of this period is the formation or recognition of the National Museums in India, now altogether three in number. Of the three, the first to be constituted was the National Museum, New Delhi, under the aegis of the Archaeological Survey of India. In 1948, an exhibition of objects which had been taken to a London exhibition a year earlier took place in New Delhi. This formed the nucleus of the National Museum, which was declared open on the 15th August 1949. The task of nurturing the new organization fell on the Archaeological Survey of India, which continued to be responsible for it till 1958, when the Museum became an independent institution. Two other museums, the Indian Museum, Calcutta, and the Salarjang Museum, Hyderabad, have recently been given the status of National Museums.

Apart from these National Museums, more than thirtyfive archaeological museums have been founded in the post-Independence period. These include local museums of the Archaeological Survey of India, the establishment of which received a fresh fillip—three museums near ancient sites (Amaravati, Kondapur, and Bodh-Gaya) and four more near temple-sites or within palaces or forts (Hampi, Fort St. George, Madras, Halebid and Seringapatam) were organized between the years 1948 and 1963. Of them, the one at Kondapur was taken over from the Hyderabad Government; the Fort St. George Museum mainly houses objects of the early British period in the south, and the one at Seringapatam relics associated with Ṭīpū Sultan.

A few more museums at excavated sites like Rupar, Lothal and Ratnagiri are likely to be set up within the next few years. The existing university museums, art-galleries, temple museums, historical museums, etc., likewise, have received support both from the Government as well as from the public.

But the greatest change that has been ushered in during this period is the change in outlook, the growing realization that the physical growth of museums is not an end in itself; the qualitative aspects that aspire to democratize these institutions are now receiving greater emphasis. Every effort is being made to re-organize the museums on modern lines with improved methods of display, etc. The conception of public museums—museums as a means of general education—is now fast gaining ground. For the first time museology as a subject is being taught in some universities in India; training abroad is also receiving attention. The Government of India is providing each year grants-in-aid to museums for extensions to buildings and general improvements, including publications. Above all, the National Museum, New Delhi, is engaged in setting up an example of an ideal public museum with all modern ideas of effective display and educational facilities.

3. IMPORTANT MUSEUMS

It is evident from the foregoing that present-day India has different types of archaeological museums, controlled and financed by different categories of administrative bodies ranging from the Central Government to temple-committees. On grounds of administrative control and finances, they may be divided broadly under seven categories, viz., the National Museums, State Museums, local museums under the

Archaeological Survey of India, museums under the control of civic or corporate bodies, museums of learned societies and university museums. There are other museums with a local character, of which the Art-gallery at Thanjavur houses a number of excellent south Indian bronzes (pl. XCV) and stone sculptures. A brief description of the salient features of the representative museums under each category is given below. Out of consideration of space and the relative unimportance of the collections a large number of museums have not been mentioned.

A. The National Museums

Indian Museum, Calcutta (1814)[1].—The Archaeological Section of the Museum represents the finest and the largest collection of archaeological and historical material in India. Its enormous collection of Stone Age tools from all over India, including that of the Yale-Cambridge Expedition of 1935, and excavated finds from Harappa, Mohenjo-daro and other chalcolithic sites in Sind and megalithic sites from the south, besides a portion of the copper-hoard from Gungeria, offer an important, even indispensable, source for prehistoric and protohistoric studies. It is remarkably rich in sculptures ranging in date from the third century B.C. to the late medieval period—the bull-capital (pl. LXXXIV) from Rampurwa (now in the Rashtrapati Bhawan, New Delhi), the *kalpa-druma* capital, Śrī-Lakshmī and the *yakshas* from Patna—are some of the priceless pieces of the early series. In a separate gallery are housed the re-assembled *stūpa*-railings and one of the four gateways of the Bharhut

[1] Numerals within bracket indicate the date of establishment of the respective Museum.

stūpa (pl. LXXXV A). There is no other museum in India where there is such a varied collection of Gandhāra sculptures (pl. LXXXVI B), recovered from sites like Taxila, Jamalgarhi, Sahribahlol, Takht-i-Bahi, Peshawar, the Swat valley and Charsada. Some masterpieces from Khajuraho (pl. XCIII) and of Pāla art (pl XCIV A) are exhibited in its medieval sculpture gallery. This Museum is also one of the richest repositories of Indian coins in the world and includes many rare issues. Of the reliquaires, the most important is a vase from Piprahwa, the inscription on which is datable to the fourth century B.C.

SALARJANG MUSEUM, HYDERABAD (1951).—This Museum owed its origin to the life-long mission of Mir Yusuf Ali Khan, the last of the illustrious Salarjang family of Hyderabad, to acquire curios from different parts of the globe. At present this is the largest museum in India of medieval and modern arts and crafts; it houses also a collection of toys and dolls exclusively meant for children. No less important is its collection of manuscripts, which include many an illuminated Quran and beautifully-illustrated classical works by eminent poets. An emerald and ruby-dagger of Nurjahān, a dagger encrusted with diamonds, rubies and emeralds belonging to Jahāngīr and equally attractive swords and daggers of Shāhjahān, Aurangzeb, etc., are some of the unrivalled exhibits in its arms-collection. Some pieces of furniture associated with Louis XIV and Louis XV have also found their way into this Museum.

NATIONAL MUSEUM OF INDIA, NEW DELHI (1949). —The Museum is rich in protohistoric materials recovered from sites like Harappa, Mohenjo-daro, Jhukar, Jhangar, Amri, Nal, etc. Sculptures, ranging in date from the time of Aśoka to the late medieval period, include quite a number of remarkable pieces

of Indian art, viz., standing Buddha, bathing woman (pl. LXXXVI C) and a Bacchanalian scene from Mathura and a *vidyādhara* couple from Aihole (pl. XCIB), etc. Other important collections include terracottas from the Indus valley sites, Ahichchhatrā, Kauśāmbī, Kondapur, Nālandā, etc., besides textiles and Persian and Arabic manuscripts. The figures of Gangā (pl. LXXXIX) and Yamunā from Ahichchhatrā, the largest terracotta sculptures in India, are in this Museum. The bronzes include a few superb Choḷa pieces as well as those representing the medieval eastern school; the dancing girl from Mohenjo-daro is on the view here. It has a very rich collection of paintings, particularly strong in the Rajput and Pahari schools. The magnificent collection of the Central Asian Antiquities Museum, including the famous wall-paintings, has now been transferred to this Museum by the Archaeological Survey of India.

B. STATE MUSEUMS

RAJPUTANA MUSEUM, AJMER (1908).—This is one of the oldest archaeological museums in Rajasthan. The important exhibits here comprise Brāhmaṇical and Jaina sculptures, stone and copper-plate inscriptions, coins and Rajput paintings.

GOVERNMENT MUSEUM, BANGALORE (1866).—The archaeological collection mainly consists of Hoysala sculptures from Halebid and Belur. Antiquities from Brahmagiri and Chandravalli are also seen here, in addition to coins of Mysore rulers.

BARODA MUSEUM AND PICTURE-GALLERY, BARODA (1894).—The Museum, the largest and the most important in Gujarat, displays in its Archaeological Section objects from the Harappan times to the fifteenth century A.D.; of the collection of bronzes, the *mātrikās* of Idar and the Jaina bronzes from Akota (pl. XCII A)

are noteworthy. The collection of Indian paintings representing different schools and the international sections are of great attraction to visitors.

ORISSA STATE MUSEUM, BHUBANESWAR[1] (1932).—Prehistoric tools, stone and metal sculptures, palm-leaf manuscripts, wood-carvings, etc., mainly recovered from Orissa, are exhibited here.

BHURI SINGH MUSEUM, CHAMBA (1908).—The Museum, started by Raja Bhuri Singh with an idea of preserving the ancient relics pertaining to the history of the then Chamba State, houses archaeological objects like sculptures, stone and copper-plate inscriptions, sculptured fountain-stones, wood-carvings, historical documents and a large number of paintings.

STATE MUSEUM, DHUBELA[2] (1937).—Jaina images of *Tīrthaṅkars*, *yakshas* and *yakshīs* and a group of Devī images form Gurgi, etc., form important collections of its sculpture-gallery. Noteworthy in its epigraphical collections are inscriptions of the Kushan and Gupta periods, early copper-plate grants and several Kalachuri records.

STATE MUSEUM, GAUHATI (1940).—The principal attractions of this Museum are stone and metal sculptures, inscriptions including two charters of Bhāskaravarman (seventh century) and Assamese manuscripts written on thin barks.

ARCHAEOLOGICAL MUSEUM, GWALIOR (1922).—The sculptures of this Museum, covering a period from the third century B.C. to the seventeenth century A.D., include many outstanding specimens of Indian art like the palm-capital from Besnagar, panel depicting dance-scene (pl. XCI A) and terracotta heads from Pawaya, the lion-capital from Udaigiri, Māṇibhadra

[1] Originally at Cuttack.
[2] Originally at Rewa.

yaksha and the mother-and-child from Badoh. An inscription of Kumāragupta is an important exhibit. Apart from the collection of Rajput and Mughal paintings, it has fine copies of the wall-paintings of the Bagh caves.

HYDERABAD MUSEUM, HYDERABAD (1930).—Sculptures dating from the Sātavāhana period (first-second century) to the time of the Kākatīyas (thirteenth century) are housed here. There are also fine collections of old arms and weapons and of Bīdrī Ware. The other important features of this Museum are the copies of Ajanta and Ellora paintings, manuscripts in Arabic and Persian and coins of the Yādavas, the Vijayanagara rulers, Mughals and of the Bahmanī and other Deccan kingdoms. The prehistoric and protohistoric finds from Maski and other sites in Raichur District are here exhibited. Excavated finds from Yelleswaram are housed in a separate pavilion, attached to the office of the Director of Archaeology.

CENTRAL MUSEUM, INDORE (1929).—It possesses a rare collection of manuscripts and ancient ornaments, besides inscriptions on stones and bricks as well as sculptures. Pottery from Kasrawadh with Mauryan inscriptions on them is very interesting.

GOVERNMENT CENTRAL MUSEUM, JAIPUR (1876).—The archaeological adjunct of the Museum contains excavated finds from Bairat, Sambhar and Rairh; other objects of interest are *yūpa-stambhas* from Barnala and sculptures from Abaneri and Amber.

DOGRA ART-GALLERY, JAMMU (1954).—The greatest attraction of this Museum is its collection of more than four hundred Pahari paintings. It has also a fine collection of historic arms, textiles and manuscripts including the *Shāh-nāma*, *Sikandar-nāma*, etc.

STATE MUSEUM, LUCKNOW (1863).—The Archaeological section of this Museum includes Brāhmaṇical,

Buddhist and Jaina images from various sites of Uttar Pradesh, of which the Jaina sculptures from Kaṅkālī-ṭīlā, Mathura, and the *Rāmāyaṇa*-tablets from Saheth-Maheth occupy a place of distinction. Its numismatic collection is rich in the punch-marked, Gupta and Mughal series. Equally rich are its collections of paintings and manuscripts.

GOVERNMENT MUSEUM AND NATIONAL ART-GALLERY, MADRAS (1851).—In the collection of the specimens of plastic art and metal sculptures the Archaeological Section of this Museum holds definitely a pre-eminent position. The bas-reliefs from Amaravati, Goli and other Buddhist sites in the Krishna valley, Jaina antiquities from Danavulapadu and sculptures and architectural pieces of the Pallava, Choḷa and other later periods form invaluable collections of this Museum. But nothing can parallel its large and varied collection of south Indian bronzes—the richest in the world. The images of dancing Śiva, including the world-famous Naṭarāja of Tiruvelangadu (pl. XCVI), occupy a singular position; equally prominent are the excellent Śaivite (pl. XC), Vaishṇavite, Jaina and Buddhist metal images collected from different parts of south India. Also there is an enormous collection of copper-plate charters issued by south Indian rulers. Of immense importance are the protohistoric antiquities from Adichanallur, Perumbair and other megalithic sites and also the unique Bruce Foote collection of stone implements, purchased by the Museum in 1904.

MUSEUM OF ARCHAEOLOGY, MATHURA (1863).—Sculptures mostly in red sandstone, collected from Mathura and its neighbourhood and comprising royal statues, including those of Vima Kadphises, Kanishka, Chashṭana, etc., and Brāhmaṇical, Buddhist and Jaina images, mostly datable to the Kushan period,

are the proud possession of this Museum. In fact, this Museum 'ranks foremost for the study of history and art of the Kushan period'. It has a rich collection of terracottas dating from Mauryan to the medieval times.

CENTRAL MUSEUM, NAGPUR (1863).—The Archaeological Section contains antiquities ranging from the Early Stone Age to medieval times; they form an indispensable source for the reconstruction of the history of the region. There are stone and copper-plate inscriptions of the Chāḷukyas, Kalachuris of Tripurī, Ratanpur and Raipur and of the Vākāṭakas and the Rāshṭrakūṭas, besides sculptures and metal images. The Mughal and Bhonsla paintings and a Babylonian cylinder-seal of about 2000 B.C. found at an unknown site in India are also noteworthy.

GOVERNMENT MUSEUM, PATIALA (1947).—A collection of Gandhāra sculptures and Brāhmaṇical and Jaina antiquities, in addition to a collection of Pahari paintings, form the notable exhibits in this Museum.

PATNA MUSEUM, PATNA (1917).—It has a splendid collection of sculptures comprising the famous Didarganj *yakshī*, a polished lion-head from Masarh and the two Jaina torsos of *Tīrthaṅkars* from Lohanipur, all the four of Mauryan age, besides examples of Śuṅga, Gupta and Pāla art, the last-mentioned series including one of the earliest dated images of the time of Devapāla (ninth century). A large number of bronzes of Pāla and Sena periods, including the treasure-trove bronzes from Kurkihar (pl. XCII B), have considerably enriched the Museum-collection. It is also rich in terracottas collected from places like Pāṭaliputra, Buxar, Mathura, Kauśāmbī, Bhita, Rajgir, Vaiśālī, etc. Another important group of finds comprises ring-stones carved with fertility-designs from Pāṭaliputra. Stone and Copper Age implements from different

parts of Bihar are also on show here. No less significant is its collection of Tibetan banners and coins, particularly punch-marked ones.

MAHANT GHASIDAS MEMORIAL MUSEUM, RAIPUR (1875).—It has interesting post-Gupta and Kalachuri sculptures, a small collection of Buddhist bronzes from Sirpur (seventh-eighth century), an inscribed wooden pillar from Kirari (second century) and copper-plates of the Śarabhapurīyas, Somavaṁśis and Kalachuris of Dakshina-Kosala.

SRI PRATAP SINGH GOVERNMENT MUSEUM, SRINAGAR (1898).—The Archaeological Section of the Museum displays sculptures ranging from the fifth to the fifteenth centuries and coins of Indo-Bactrian, Indo-Scythian, Kushan, and Gupta and other kings. A special attraction of this Museum is its collection of about three hundred paintings, mostly of the Kangra school, and textiles.

ARCHAEOLOGICAL MUSEUM AND PICTURE-GALLERY, TRICHUR (1938).—Amongst the archaeological exhibits noteworthy are the finds from the megalithic monuments of Cochin and mid-Kerala, some excavated finds showing Roman contacts, inscriptions dating from the tenth to the eighteenth centuries and wood-carving and metal images of *circa* eleventh century. Copies of more than one hundred panels of mural paintings from the Mattancheri Palace, Cochin, and Vaḍakkunnāthan temple, Trichur, are on view here.

C. LOCAL MUSEUMS UNDER THE ARCHAEOLOGICAL SURVEY OF INDIA

ARCHAEOLOGICAL MUSEUM, AMARAVATI (1951).—The Museum, which is at present only a sculpture-shed, contains many pieces of carved architectural fragments of the *stūpa* as well as of its railing recovered

from the famous Buddhist site, which range in date from the second century B.C. to the third century A.D. The place of pride is occupied by a small group of limestone sculptures (pl. LXXXV B), unmistakably imprinted with Bharhut tradition. There are beautiful sculptures datable to the medieval period as well. A new museum-building is being constructed here.

ARCHAEOLOGICAL MUSEUM, BIJAPUR (1912).—The collection includes stone inscriptions in Arabic, Persian, Sanskrit and Kannada, Brāhmanical and Jaina sculptures, Arabic, Persian, and Urdu manuscripts, arms and weapons, chinaware, wood-carvings, maps and valuable ancient carpets, found at Bijapur and its neighbourhood.

ARCHAEOLOGICAL MUSEUM, BODH-GAYA (1956).—The exhibits consist of stone and metal images, mostly of the Pāla period. Two *yakshīs*, datable to the first century B C., are also on view here.

DELHI FORT MUSEUM, DELHI (1909).—Antiquities like inscriptions of the Sultanate and Mughal periods, arms, old documents like *farmāns*, *sanads* and maps, relics of the 1857-upheaval, carpets, manuscripts and specimens of calligraphy, dresses, etc., of the Mughal period are displayed in this Museum.

ARCHAEOLOGICAL MUSEUM, HALEBID (1962).—Sculptures (pl. XCIV B) and architectural pieces of the Hoysala period form the collection in this open-air Museum at the site of the old Hoysala capital, which is full of temples.

ARCHAEOLOGICAL MUSEUM, HAMPI (1953).—Most of the sculptures and architectural pieces belong to the Vijayanagara period and were recovered from the site of the ancient capital of the Vijayanagara kings.

ARCHAEOLOGICAL MUSEUM, KHAJURAHO (1910).—About two thousand sculptures and architectural pieces representing three principal faiths, i.e. Buddhist

Brāhmaṇical and Jaina, all of the tenth to twelfth centuries, are on show in this open-air Museum. Some of them are masterpieces of medieval central Indian art.

ARCHAEOLOGICAL MUSEUM, KONDAPUR (1952).—The exhibits here include a rich collection of terracotta figurines, beads, pottery, etc., datable to the Sātavāhana period. There is also a collection of Stone Age tools. Figurines made of kaolin are also on view.

FORT ST. GEORGE MUSEUM, MADRAS (1948).—The records and antiquities in the Museum offer scope for the study of the growth of Fort St. George, Madras, the first British settlement in India, in particular and early Indo-British history in general. There are arms, manuscripts, paintings, prints, coins, medals, textiles, porcelain, etc., of that period.

ARCHAEOLOGICAL MUSEUM, NAGARJUNAKONDA (1949).—Excavated materials from the Early Stone Age to medieval times are housed in two different buildings in the valley, which is now threatened with submergence as a result of the construction of a dam across the Krishna. A new museum-building on a safe hill-top is, however, now complete and will soon be thrown open. Sculptures (pl. LXXXVII) datable to the third-fourth century are the principal objects of attraction, though the museum is equally rich in many other classes of Indian antiquities. This is the only site in India where the important salvaged monuments have been reconstructed at places above submergence-level. The new Museum will be the first island-museum in India.

ARCHAEOLOGICAL MUSEUM, NĀLANDĀ (1917).—This Museum has a fine collection of stone and bronze images of the Buddhist gods and goddesses and a few images of the Hindu pantheon, all representing the Pāla school of art at its best, found at the famous

Buddhist centre of Nālandā. The late Gupta period is represented by a few stucco heads. Inscriptions of the time of Yaśovarmadeva of the eighth and of Vipulaśrīmitra of the twelfth century, sealings of royalties of the Gupta and Maukhari dynasties and numerous official sealings of the Nālandā monastery are some of the interesting features of this Museum. Some antiquities from Rajgir are exhibited here.

ARCHAEOLOGICAL MUSEUM, SANCHI (1919).—An Aśokan lion-capital, fragments of gateway and railings, monastic and household utensils of iron, copper and bronze and also casts of a few relic-caskets, besides a number of carvings from the Mauryan to the medieval times, form the important antiquities here.

ARCHAEOLOGICAL MUSEUM, SARNATH (1904).—Antiquities in this Museum represent the works of art of the Maurya, Śuṅga, Kushan, Gupta and medieval periods. The place of pride is occupied by the 2-m. high lion-capital of Aśoka (pl. LXXXIII). A colossal standing Bodhisattva of the Mathura school belonging to the reign of Kanishka, some prize-pieces of Gupta and later art, like the images of Buddha (pl. LXXXVIII), the Bodhisattvas, etc., all in Chunar sandstone, are on view here.

TĪPŪ SULTAN MUSEUM, SERINGAPATAM (1959).—Objects connected with the history of Haidar 'Alī and Ṭīpu Sultan and their contemporary history are housed in Ṭīpū's summer-place of Dariyā-Daulat-Bāgh.

D. MUSEUMS UNDER CORPORATE OR CIVIC BODIES

ALLAHABAD MUSEUM, ALLAHABAD (1931).—Several pieces of the Bharhut railing, fragments from the Śiva temple of Bhumara, sculptures from Khajuraho, Kauśāmbī and Mathura and also some of Gandhāra school form the bulk of the sculpture-collection. Its terracotta

collection, mainly from Kauśāmbī and Jhusi, is very important. Several remarkable issues of the Kauśāmbī rulers are to be seen in the coin-cabinet. There are also excellent examples of Indo-Persian, Mughal and Rajput paintings : the Mughal ones include some choicest pieces of the time of Akbar and Jahāngīr. The Pahari school is represented by a few fine paintings from Guler and Basohli.

PRINCE OF WALES MUSEUM OF WESTERN INDIA, BOMBAY (1921).—The fine collection of early sculptures of the Museum comprises examples of Gandhāra and Amaravati art, terracottas from Mirpurkhas in Sind and sculptures of Chāḷukyan and Rāshṭrakūṭa periods. Its rich numismatic collection is well-known and the inscriptions in possession of the Museum range in date from the Aśokan to the medieval period. The copper-plate grants of the Valabhī dynasty of Kathiawar form an important group. Recently an Aśokan inscription in Kharoshṭhī engraved on a bowl has been acquired by the Museum. The prehistoric and proto-historic collections include exhibits like Early Stone Age implements from Cuddapah and neoliths from Amaravati, Perumbair and Banda District. The non-Indian section of the Museum is highly interesting. The collection of Indian miniature paintings in the Art Section is also particularly rich.

VICTORIA AND ALBERT MUSEUM, BOMBAY (1850).—It is mainly an industrial and agricultural museum, but there is a good collection of eighteenth-century paintings of *nava-grahas* and *ashṭa-dikpālas*, a small collection of paintings of the Mughal, Rajput and other schools, *rāga-mālā* paintings of the Jaipur school and Persian and Jaina manuscripts.

VICTORIA MEMORIAL HALL MUSEUM, CALCUTTA (1906).—The collection is representative of the different phases of Indo-British history. There are busts, statues

and imposing paintings of British kings and queens, Warren Hastings, Cornwallis, Wellesley, Dalhousie, etc., and also portraits of Rudyard Kipling, Burke and Macaulay. The piano and the writing-desk of Queen Victoria are in this Museum.

E. MUSEUMS OF LEARNED SOCIETIES

ASIATIC SOCIETY MUSEUM, CALCUTTA (1784).—The Society still possesses a precious and select collection of oil-paintings, besides stone and copper-plate inscriptions, ranging from the third century B.C. to the eighteenth century A.D. The Bairat rock-edict of Aśoka is exhibited here.

BANGIYA SAHITYA PARISHAD MUSEUM, CALCUTTA (1910).—It has several old manuscripts and valuable sculptures and bronzes of the Pāla school. Articles used by literary celebrities form an interesting collection of the Museum.

KANNADA RESEARCH INSTITUTE MUSEUM, DHARWAR(1910).—A large collection of Buddhist, Brāhmaṇical and Jaina images in stone and metal, inscriptions from Karnatak, coins and manuscripts form the important attraction of this Museum.

BHARATIYA ITIHASA SAMSODHAK MANDAL MUSEUM, POONA (1910).—The Museum has a notably large collection of documents and manuscripts, besides coins and paintings, all of historical and cultural importance, particularly to Maratha history. The excavated material from Karad, North Satara, and surface-finds from Nasik are housed here.

F. UNIVERSITY MUSEUMS

KAUŚĀMBĪ MUSEUM, UNIVERSITY OF ALLAHABAD, ALLAHABAD (1952).—Antiquities excavated at Kauśāmbī since 1949 are housed here. It has some inscriptions, coins and a large collection of sculptures.

Department of Archaeology Museum, Maharaja Sayajirao University, Baroda (1950).—The exhibits represent the result of explorations and excavations conducted by the Department in the Gujarat area and the Narmada valley.

Asutosh Museum of Indian Art, University of Calcutta, Calcutta (1937).—Some of the material recovered in exacavtions at sites like Paharpur, Mahasthangarh, Baigram and Rangamati and the full collection of antiquities from Bangarh and Chandraketugarh are to be seen in the Museum. It has a large and varied collection of sculptures too of the Pāla period, besides terracottas from early sites in West Bengal, Mathura and other places, bronzes, coins, miniatures from Nepal, palm-leaf manuscripts, inscriptions and wooden objects.

Deccan College Post-graduate and Research Institute Museum, Poona (1939).—The Archaeological Museum was built up with the objects excavated by the Institute in Gujarat, the Deccan, Karnatak, Andhra Pradesh and Madhya Pradesh since 1941. It contains tools, skeletons and fossils of the Stone Ages. The excavated material from Navdatoli, Maheswar, Jorwe, Nasik, Nevasa, Ahar, etc., are exhibited here.

Bharat Kala Bhavan, Hindu University, Varanasi (1950).—The Museum was originally a private collection, transferred to the University in 1950. The museum-collection covers Indian paintings, textiles, jewellery, coins, manuscripts, etc. Some outstanding examples of Indian art (pl. LXXXVI A) are to be seen here.

4. ACKNOWLEDGEMENTS

The writer has largely drawn material of this chapter mainly from S.F. Markham and H. Hargreaves'

The Museums of India (London, 1939), K.N. Puri's, 'Archaeological Museums' in *Archaeology in India* (Delhi, 1950), A. Ghosh's article entited, 'Fifty years of the Archaeological Survey of India', *Ancient India*, no. 9 (1953), and C. Sivaramurti's *Directory of Museums in India* (Delhi, 1959). The writer's thanks are due to these pioneers, some of whom are still intimately associated with the development of archaeological museums in India. Acknowledgments are due also to the authorities of some Museums for permission to publish photographs, respectively illustrated on pls. LXXXVI C, LXXXIX and XCI A (National Museum, New Delhi), XC and XCVI (Government Museum, Madras), XCII B (Patna Museum), LXXXVI A (Bharat Kala Bhavan, Varanasi), XCI A (Archaeological Museum, Gwalior), XCII A (Baroda Museum and Art-gallery, Baroda) and XCV (Art-gallery, Thanjavur).

H. SARKAR

INDIA
SHOWING PLACES
WITH
IMPORTANT MUSEUMS
AFGHANISTAN
WEST PAKISTAN
SRINAGAR
JAMMU
CHAMBA
PATIALA
DELHI
MATHURA
JAIPUR
AGRA
AJMER
LUCKNOW
ALLAHABAD
SARNATH
PATNA
GWALIOR
DHUBELA
UDAIPUR
KHAJURAHO
VARANASI
NALANDA
BODH-GAYA
RAJKOT
INDORE
SANCHI
BARODA
CALCUTTA
NAGPUR
RAIPUR
CUTTACK
BHUBANESWAR
BOMBAY
POONA
KONDAPUR
HYDERABAD
RAJAHMUNDRY
BIJAPUR
NAGARJUNAKONDA
VIJAYAWADA
DHARWAR
AMARAVATI
HAMPI
HALEBID
BANGALORE
MADRAS
SERINGAPATAM
MYSORE
TRICHUR
THANJAVUR
TRIVANDRUM
CEYLON
CHINA
NEPAL
BHUTAN
GAUHATI
EAST PAKISTAN
BURMA
ARABIAN SEA
BAY OF BENGAL
■ - MUSEUMS AT MODERN TOWNS
● - MUSEUMS NEAR ANCIENT SITES
ANDAMAN AND NICOBAR ISLANDS (INDIA)
KILOMETRES
MILES

Fig 6

INDEX[1]

[1] Prepared by Shri O. P. Tandon, assisted by Shri K. M. Srivastava and Shri K. N. Dikshit.

B

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K

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S

V

W

Y

Z

PLATE LIX

Badami Mālegitti-Śivālaya See p 197

PLATE LX

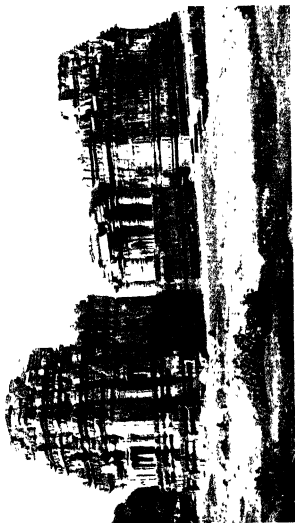
Patadkal Virūpāksha temple See p 201

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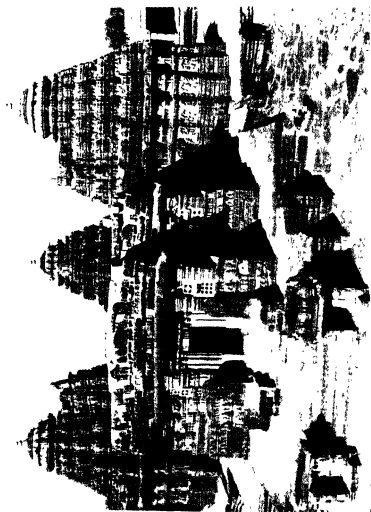
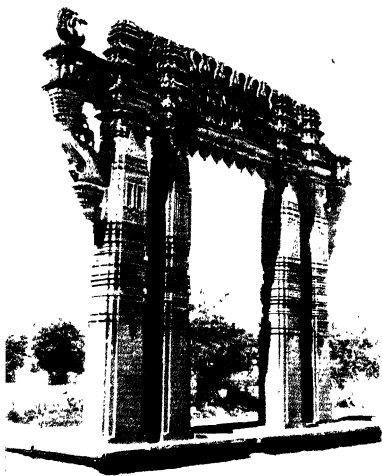
PLATE LXII

Somnathpur Kesava temple See p 212

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Warangal torana of a ruined temple within fort *See p. 213*

PLATE LXIV

Mahabalipuram Shore-temple *See p 215*

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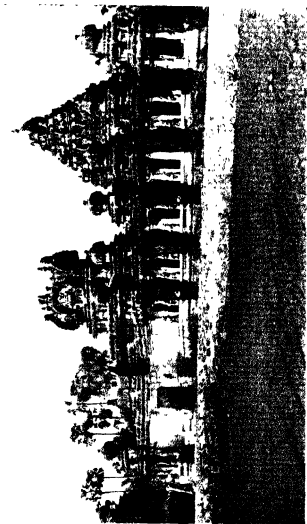
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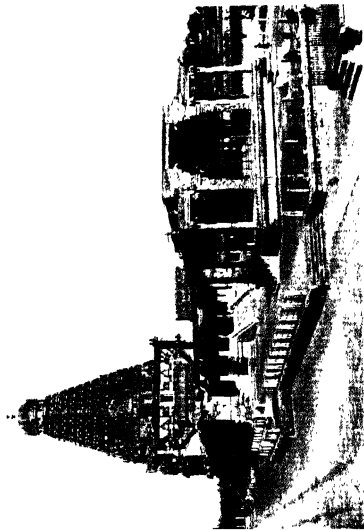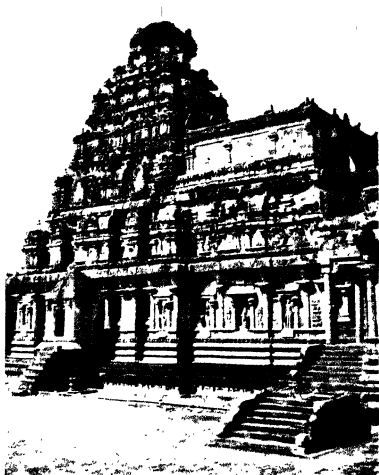
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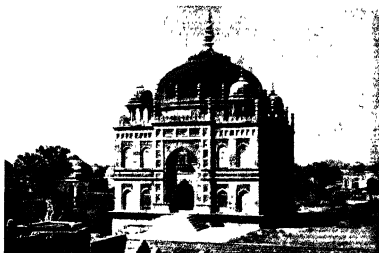
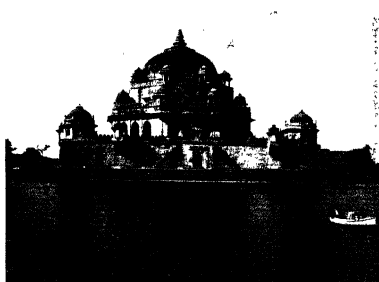

A

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PLATE LXXIV

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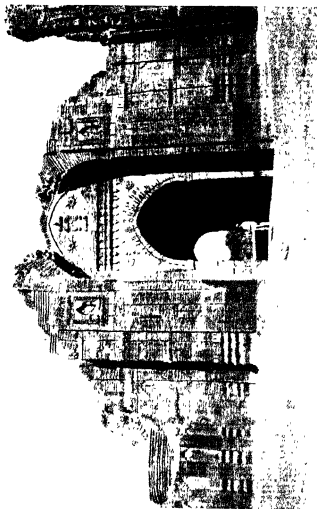
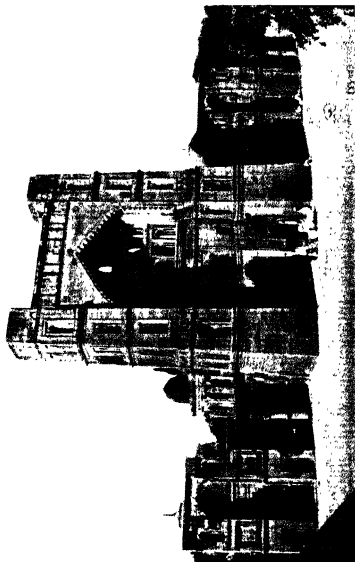
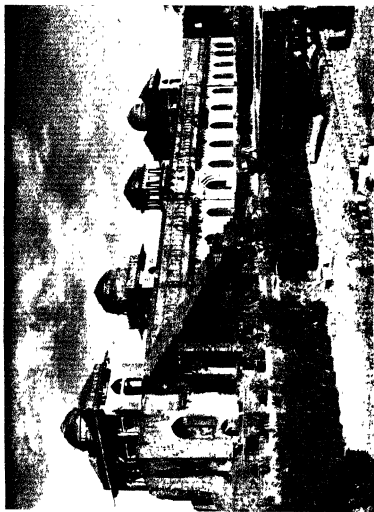
PLATF LXXV

Jaunpur Aṭāla-Masjid *See p 270*

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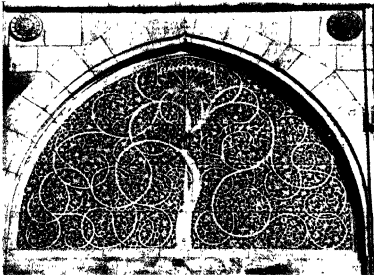
Mandu Jahāz-Maḥal *See p.* 282

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B

A, *Ahmadabad a screen in Sīdī Sa'id's mosque*, B, *Gulbarga cloisters of Jāmi'-Masjid* *See pp 277 and 285*

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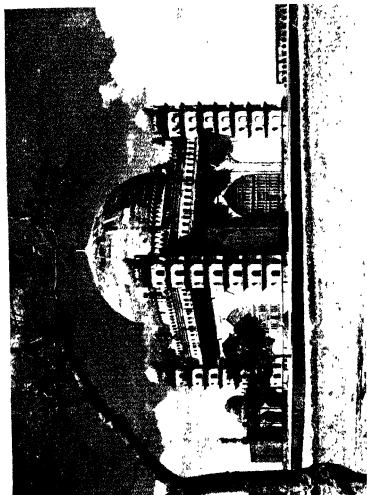
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PLATE LXXX

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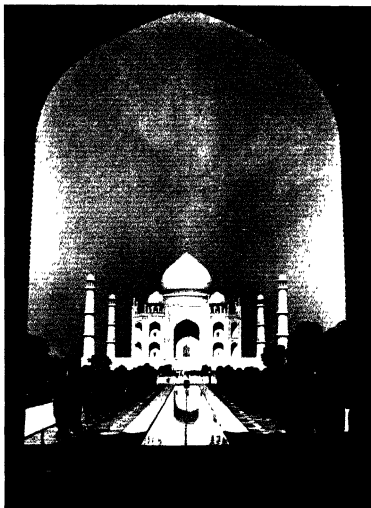
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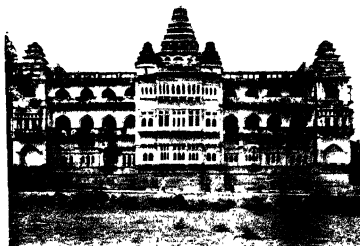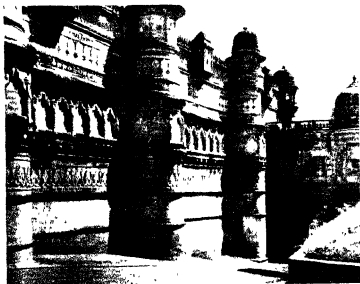
B

A, *Gwalior fort, exterior view*, B. *Chandragiri palace*
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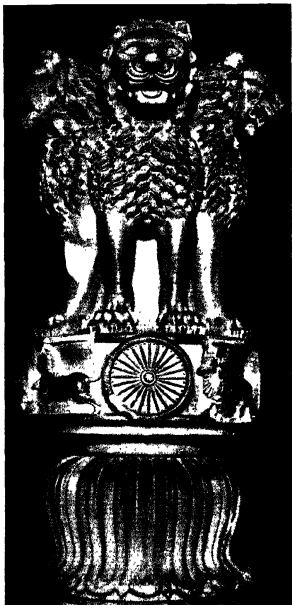
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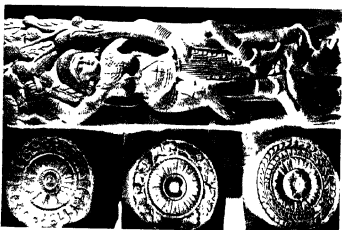
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PLATE LXXXVI

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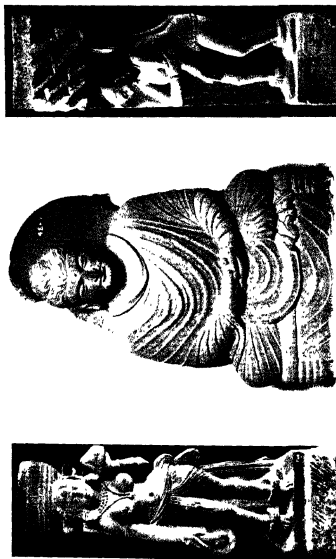
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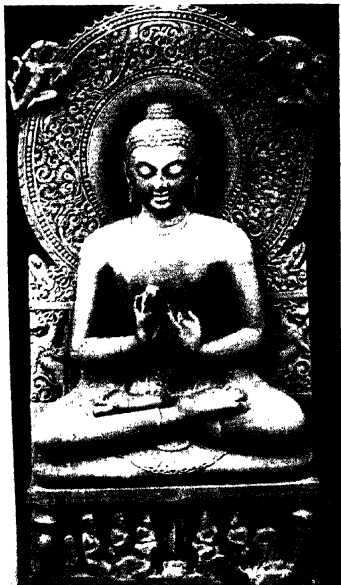
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